pennacool.com SEA Practice Test Worked Solutions

## MATHEMATICS

|  | pennacool.com Test 1 - Section 1 |
| :---: | :---: |
| 1. | hundredths |
| 2. | No, she is not correct. She should have written 12,006. |
| 3. | $29+71+61=161$ |
| 4. | $\begin{gathered} 9.01 \\ 981.09 \\ 81 \downarrow \\ \hline 0009 \\ -\quad 9 \\ \hline 0 \\ \hline \end{gathered}$ |
| 5. | $\begin{aligned} & 6+B=15 \\ & B=15-6=9 \\ & \\ & 1+8+A=17 \\ & 9+A=17 \\ & A=17-9=8 \end{aligned}$ |
| 6. | $\begin{aligned} & 7 \frac{2}{3}=7.666 \\ & 7.666<7.68 \end{aligned}$ |
| 7. | $\begin{aligned} & 0 \text { to } 1 \mathrm{~m}=100 \mathrm{~cm} \\ & 1 \text { space }=10 \mathrm{~cm} \\ & 8 \text { spaces }=10 \mathrm{~cm} \times 8=80 \mathrm{~cm} \end{aligned}$ |
| 8. | $\frac{4}{12} \times \frac{100}{1}=33 \frac{1}{3} \%$ |
| 9. | 9 8 6 3 <br> 8 is $>5$, therefore 9 will be increased by 1 . $9,863 \approx 10,000$ |
| 10. | $\begin{aligned} & \text { hrs mins } \quad 1 \text { hour } 40 \mathrm{~min} \\ & \mathbf{M}: \not Q^{+60}=70 \\ & -8: 30 \\ & \hline 1: 40 \end{aligned}$ |
| 11. | $0.465,37 \frac{1}{2} \%, \frac{1}{4}$ |
| 12. | $\begin{array}{cccc} \hline \mathrm{kg} & \mathrm{~g} & & 475 \\ 1+2 & 475 \\ & 479=16 \\ +3 & 790 & & \begin{array}{c} 1265 \\ \\ +6 \end{array} \\ \hline 6 & 265 & \end{array}$ |


| 13. | Cuboid |
| :---: | :---: |
| 14. | $\begin{aligned} & \text { Unsold }=96-64=32 \\ & \frac{32}{96}=\frac{1}{3} \end{aligned}$ |
| 15. |  |
| 16. | 80 is the only number that appears more than once. |
| 17. | 2 angles |
| 18. | 1 right angle $=3$ spaces 3 right angles $=9$ spaces $2+9=11$ |
| 19. | $\begin{aligned} \text { Thursday } & =473-(96+84+76+128) \\ & =473-384 \\ & =89 \text { books } \end{aligned}$ |
| 20. | $\begin{aligned} & \text { Mean }=\frac{28+32}{2}=\frac{60}{2}=30 \\ & 36+\square=60 \\ & \square=60-36=24 \end{aligned}$ |
|  | pennacool.com Test 1 -Section 2 |
| 21. | $\begin{aligned} & (6 \times \square)+40=11 \times 8=88 \\ & 6 \times \square=88-40=48 \\ & \square=48 \div 6=8 \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Kept }= 1-\left(\frac{1}{4}+\frac{3}{8}\right)=1-\frac{5}{8} \\ &=\frac{3}{8}=0.375 \end{aligned}$ |
| 23. | $\left.\begin{array}{l} 1 \text { bow }=\frac{1}{2} \mathrm{~m} \end{array} \quad \begin{array}{rl} 15 \mathrm{~m} \text { will make }= & 15 \div 12 \\ =30 \text { bows } \end{array}\right\} \begin{aligned} \text { To make } 300 \text { bows } & =\frac{300}{30} \times 15 \mathrm{~m} \\ & =150 \mathrm{~m} \end{aligned}$ |

1

| 24. | $\begin{aligned} & 1 \text { day }=\$ 596.00 \div 10=\$ 59.60 \\ & \text { April }(30 \text { days })=\$ 59.60 \times 30 \\ &=\$ 1,788.00 \end{aligned}$ |
| :---: | :---: |
| 25. | Week 1: 8 km , Week 2: $8+3=11 \mathrm{~km}$, Week 3: $11+3=14 \mathrm{~km}$, Week 4: $14+3$ $=17 \mathrm{~km}$, Week 5: $17+3=20 \mathrm{~km}$, Week 6: $20+3=23 \mathrm{~km}$, Week 7: $23+3$ $=26 \mathrm{~km}$, <br> Week 8: $26+3=29 \mathrm{~km}$ |
| 26. | $\begin{aligned} & \text { Sam }=50 \% \\ & \text { Remainder }=50 \% \\ & \text { Ryan }=\frac{3}{10} \times \frac{50}{1}=15 \% \\ & \text { Remainder }=100 \%-(50 \%+15 \%)=35 \% \end{aligned}$ |
| 27. | Price of 1 bat $=\frac{75}{100} \times \frac{\$ 96}{1}=\$ 72$ <br> Price of 2 bats $=\$ 72 \times 2=\$ 144$ <br> Price of 1 ball $=\frac{5}{8} \times \frac{\$ 24}{1}=\$ 15$ <br> Price of 6 balls $=\$ 15 \times 6=\$ 90$ <br> Total Price $=\$ 144+\$ 90=\$ 234.00$ |
| 28. | $\text { Keenan has }=\frac{1}{3} \times \frac{\$ 6000}{1}=\$ 2000$ <br> He needs $=\$ 6000-\$ 2000=\$ 4000$ $1 \text { day he earns }=\$ 80 \times 5=\$ 400$ $\begin{aligned} \text { He will take } & =\frac{\$ 4000}{\$ 400} \\ & =10 \text { days } \end{aligned}$ |
| 29. | Nos. between 70 and $80=71,72,73,74$, 75, 76, 77, 78, 79 <br> Arya chose $72(6 \times 9)$ |
| 30. | $\begin{aligned} & \text { Flour }=\frac{120}{24} \times \frac{4}{1}=20 \mathrm{cups} \\ & \text { Eggs }=\frac{120}{24} \times \frac{6}{1}=30 \mathrm{eggs} \end{aligned}$ |
| 31. | $\begin{aligned} & \text { Tie }+ \text { Belt }=\$ 575-(\$ 350+\$ 60+30)=\$ 135 \\ & x+2 x=\$ 135 \\ & 3 x=\$ 135 \\ & x=\frac{\$ 135}{3}=\$ 45 \\ & \text { Tie }=\$ 45.00, \text { Belt }=\$ 45 \times 2=\$ 90.00 \end{aligned}$ |
| 32. | $\begin{aligned} & 30 \text { billboards }=3 \mathrm{~m} \times 30=90 \mathrm{~m} \\ & \text { Total spacing }=525 \mathrm{~m}-90 \mathrm{~m}=435 \mathrm{~m} \\ & 29 \text { spaces }=\frac{435 \mathrm{~m}}{29}=15 \mathrm{~m} \end{aligned}$ |


| 33. | $\begin{aligned} & \text { 2.4 } \mathrm{L}=2400 \mathrm{ml} \\ & \text { Amt of juice poured }=2400 \mathrm{ml}-960 \mathrm{ml} \\ & =1440 \mathrm{ml} \\ & \begin{aligned} 1 \text { glass } & =1440 \mathrm{ml} \div 6 \\ & =240 \mathrm{ml} \end{aligned} \end{aligned}$ |
| :---: | :---: |
| 34. | $\begin{aligned} & \text { Perimeter }=40 \mathrm{~m} \\ & L+B=40 \mathrm{~m} \div 2=20 \mathrm{~m} \end{aligned}$ <br> He should build the coop so that he has the largest possible area. $\begin{aligned} & 19 \mathrm{~m} \times 1 \mathrm{~m}=19 \mathrm{~m}^{2} \\ & 18 \mathrm{~m} \times 2 \mathrm{~m}=36 \mathrm{~m}^{2} \\ & 17 \mathrm{~m} \times 3 \mathrm{~m}=51 \mathrm{~m}^{2} \\ & 16 \mathrm{~m} \times 4 \mathrm{~m}=64 \mathrm{~m}^{2} \\ & 15 \mathrm{~m} \times 5 \mathrm{~m}=75 \mathrm{~m}^{2} \\ & 14 \mathrm{~m} \times 6 \mathrm{~m}=84 \mathrm{~m}^{2} \\ & 13 \mathrm{~m} \times 7 \mathrm{~m}=91 \mathrm{~m}^{2} \\ & 12 \mathrm{~m} \times 8 \mathrm{~m}=96 \mathrm{~m}^{2} \\ & 11 \mathrm{~m} \times 9 \mathrm{~m}=99 \mathrm{~m}^{2} \\ & \mathbf{1 0 m} \times \mathbf{1 0 m}=100 \mathrm{~m}^{2} \end{aligned}$ |
| 35. |  |
| 36. |  |
|  | pennacool.com Test 1 - Section 3 |
| 37. | $\begin{aligned} & \text { Cost Price of } 6 \text { bolts }=\$ 150 \times 6=\$ 900 \\ & 1 \text { bolt }=50 \mathrm{~m} \\ & 6 \text { bolts }=50 \mathrm{~m} \times 6=300 \mathrm{~m} \\ & \text { Selling Price }=300 \times \$ 8=\$ 2400 \\ & \text { Profit }=\$ 2400-\$ 900=\$ 1500.00 \end{aligned}$ |
| 38. | $\begin{aligned} & \mathrm{L}=20 \mathrm{~cm} \div 4 \mathrm{~cm}=5 \text { cubes } \\ & \mathrm{B}=12 \mathrm{~cm} \div 4 \mathrm{~cm}=3 \text { cubes } \\ & \mathrm{H}=8 \mathrm{~cm} \div 4 \mathrm{~cm}=2 \text { cubes } \\ & \text { No. of cubes }=5 \times 3 \times 2=30 \text { cubes } \end{aligned}$ |
| 39. | $\begin{aligned} & 2 \text { cupcakes }+2 \text { popsicles }=\$ 40-\$ 22=\$ 18 \\ & 1 \text { cupcake }+1 \text { popsicle }=\$ 18 \div 2=\$ 9 \\ & \text { popsicle }=x, \text { cupcake }=x+2 \\ & x+x+2=9 \\ & 2 x+2=9 \\ & 2 x=9-2=7 \\ & x=\frac{7}{2}=3.50 \end{aligned}$ <br> a) 1 popsicle $=\$ 3.50$ <br> b) 1 cupcake $=\$ 3.50+\$ 2.00=\$ 5.50$ |


| 40. | a) Total no. of bottles produced $=800 \times 5$ $=4000$ <br> No. of good bottles $=4000-(25+10+45$ $+25+35$ ) <br> $=3860$ good bottles <br> b) No. of boxes $=\frac{3860}{24}$ <br> $=161$ boxes |
| :---: | :---: |
|  | pennacool.com Test 2 - Section 1 |
| 1. | 40,000 |
| 2. | Ravi is not correct. 12 is a multiple of 6 . |
| 3. | $\frac{5}{8}=\frac{10}{16}>\frac{9}{16}$ |
| 4. | $\begin{array}{r} 47.97 \not 7 \\ \times \quad .86 \not 8 \\ \hline 38.32 \end{array}$ |
| 5. | $15 \times 5=75$ marbles |
| 6. | $11+16=27$ |
| 7. | hrs mins $40+30=70 \mathrm{mins}$ <br> $2: 40$ $60 \mathrm{mins}=1 \mathrm{hr}$ <br> $+\quad: 30$ $70 \mathrm{mins}=1 \mathrm{hr} 10 \mathrm{mins}$ |
| 8. | $\begin{aligned} & 50+20+20+5+1+0.25+.1+0.05= \\ & \$ 96.40 \end{aligned}$ |
| 9. | $\begin{array}{r} 134.7 \\ -\quad 2.9 \\ \hline 11.8 \\ \hline \end{array}$ |
| 10. | $\frac{72}{90} \times \frac{100}{1}=80 \%$ |
| 11. | a and d or c and b |
| 12. | $\begin{aligned} & 1 \mathrm{~m}=100 \mathrm{~cm} \\ & 7.5 \times 100=750 \mathrm{~cm} \\ & \frac{7.5 \mathrm{~m}}{30 \mathrm{~cm}}=\frac{750 \mathrm{~cm}}{30 \mathrm{~cm}}=25 \text { pieces } \end{aligned}$ |
| 13. | 15 laps $=15 \times 9=135 \mathrm{mins}=2$ hrs 15 mins <br> hrs mins $\begin{array}{r} 5: 30 \\ +2: 15 \\ \hline 7: 45 \mathrm{am} \\ \hline \end{array}$ |


| 14. | $\begin{array}{r} 8 \not 810 \\ -\quad 4.9 \\ \hline 4.1 \\ \hline \end{array}$ |
| :---: | :---: |
| 15. | Area of 2 squares $=45 \mathrm{~cm}^{2}$ <br> Area of 1 square $=45 \mathrm{~cm}^{2} \div 2=22.5 \mathrm{~cm}^{2}$ <br> Total number of squares in the shape $=6$ <br> Total area of shape $=22.5 \mathrm{~cm}^{2} \times 6=135 \mathrm{~cm}^{2}$ |
| 16. | The shape is a parallelogram which has no lines of symmetry. Therefore, it is not symmetrical. |
| 17. | $5 \times 3 \times 3=45$ cubes |
| 18. | $\begin{aligned} & \text { Pattern }=\text { Add } 0.8 \\ & 2.4, \quad 3.2,4.0,4.8,5.6 \end{aligned}$ |
| 19. | $\begin{aligned} \text { Mean } & =\text { Sum } \div \text { Quantity } \\ & =\frac{86+74+91+64+80}{5}=\frac{395}{5} \\ & =79 \end{aligned}$ |
| 20. |  |
|  | pennacool.com Test 2 -Section 2 |
| 21. | $\begin{aligned} & \text { No. of pieces }=10 \div \frac{5}{8} \\ & =\frac{10}{1} \times \frac{8}{5}=16 \text { pieces } \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Remaining }=64-(16+32) \\ & =64-48=16 \\ & \%=\frac{16}{64} \times \frac{100}{1}=25 \% \end{aligned}$ |
| 23. | $\begin{aligned} & \text { No. of kitkats }=\frac{96}{6} \times 4 \\ & =64 \text { kitkats } \end{aligned}$ |
| 24. | $\begin{aligned} & \text { Savi }+ \text { Suri }=\$ 240 \\ & 3 x+x=4 x=\$ 240 \\ & x=\$ 240 \div 4=\$ 60 \\ & \text { Suri }=\$ 60 \\ & \text { Savi }=\$ 60 \times 3=\$ 180 \end{aligned}$ |


| 25. | $\begin{aligned} & \text { Store } \mathrm{A} \\ & 1^{\text {st }} \text { shirt }=\$ 120 \\ & 2^{\text {nd }} \text { shirt }=\frac{2}{3} \times \frac{120}{1} \\ & =\$ 80 \\ & \text { Two shirts }=\$ 120+ \\ & \$ 80=\$ 200 \end{aligned}$ | $\begin{aligned} & \text { Store B } \\ & 1^{\text {st }} \text { shirt }=\frac{1}{2} \times \frac{210}{1} \\ & =\$ 105 \\ & 2^{\text {nd }} \text { shirt }=\$ 105 \\ & \text { Two shirts }=\$ 105 \\ & +\$ 105=\$ 210 \end{aligned}$ |
| :---: | :---: | :---: |
|  | Zoe got the better deal, She paid $\$ 10.00$ less for the 2 shirts. |  |
| 26. | $\begin{aligned} & \text { Men }+ \text { Women }=240-30 \\ & x+2 x=210 \\ & 3 x=210 \\ & x=\frac{210}{3}=70 \\ & \text { Women }=(70 \times 2)+30 \\ & \quad=170 \end{aligned}$ |  |
| 27. | $\begin{aligned} & 5999 \approx 6000 \\ & 1865 \approx 2000 \\ & 6000-2000=4000 \end{aligned}$ <br> Alice estimated 5,999 to be 6,000 and 1,865 to be 1,000 giving her an answer of 5,000 . She correctly estimated 5,999 to thousands but her estimation of 1,865 to 1,000 should have been 2,000 . |  |
| 28. | $\begin{aligned} & \text { No. of fruits }=640 \\ & \text { Oranges }=\frac{1}{4} \times \frac{640}{1}=160 \\ & \text { Remainder }=640-160=480 \\ & \text { Mangoes }=\frac{3}{8} \times \frac{480}{1}=180 \\ & \text { Plums }=480-180 \\ & =300 \end{aligned}$ |  |
| 29. | $\begin{aligned} & \text { Perimeter }=(\mathrm{L}+\mathrm{B}) \times 2 \\ & =(120 \mathrm{~m}+90 \mathrm{~m}) \times 2 \\ & =210 \mathrm{~m} \times 2=420 \mathrm{~m} \\ & \text { No. of poles }=420 \mathrm{~m} \div 30 \mathrm{~m} \\ & =14 \text { poles } \\ & \text { Length of iron }=14 \times 240 \mathrm{~cm} \\ & =3360 \mathrm{~cm} \\ & \text { to } \mathrm{m}->3360 \div 100 \\ & =33.6 \mathrm{~m} \approx 34 \mathrm{~m} \end{aligned}$ |  |
| 30. | $15+30+15+40=100 \mathrm{mins}$ $4: 15$ <br> 100 mins $=1 \mathrm{hr} 40 \mathrm{mins}$ $1: 30$ <br>  $: 15$ <br>  $+1: 40$ <br>  $7: 40 \mathrm{pm}$ |  |


| 31. | Name of Solid Edges Vertices |
| :---: | :---: |
|  | Square-based <br> pyramid 8 |
| 32. | $\begin{aligned} \text { No. of each bag } & =\frac{245}{20+10+5} \\ & =\frac{245}{35} \\ & =7 \\ \text { Total no. of bags } & =7 \times 3 \\ & =21 \mathrm{bags} \end{aligned}$ |
| 33. | $\begin{aligned} & 1 \text { st enclosure }=5 \mathrm{~m} \times 5 \mathrm{~m}=25 \mathrm{~m} \\ & 2 \mathrm{nd} \text { enclosure }=10 \mathrm{~m} \times 10 \mathrm{~m}=100 \mathrm{~m} \end{aligned}$ |
| 34. | $\begin{aligned} \text { Badminton } & =\frac{45}{200} \times \frac{100}{1} \\ & =22 \frac{1}{2} \% \end{aligned}$ |
| 35. |  |
| 36. | $\begin{aligned} \text { Total score } & =49 \times 5=245 \\ \text { Ravi's score } & =245-(30+50+60+40) \\ & =245-180 \\ & =65 \text { runs } \end{aligned}$ |
|  | pennacool.com Test 2 - Section 3 |
| 37. | $\begin{aligned} & 3 \text { Ties }+4 \text { Shirts }=\$ 500 \\ & 6 \text { Ties }+7 \text { Shirts }=\$ 920 \\ & \text { Difference } ; 3 \text { Ties }+3 \text { Shirts }=\$ 920- \\ & \$ 500=\$ 420 \\ & 1 \text { Tie }+1 \text { Shirt }=\$ 420 \div 3=\$ 140.00 \end{aligned}$ |
| 38. | Difference in cost $=\$ 20$ <br> $2 \mathrm{FD}=\$ 20 \times 2=\$ 40$ <br> 6 items $=\$ 400-\$ 40=\$ 360$ <br> 1 item $=\$ 360 \div 6=\$ 60$ <br> a) $\mathrm{CD}=\$ 60.00$ <br> b) Flashdrive $=\$ 60+\$ 20=\$ 80.00$ |
| 39. | a) P4 <br> b) $\begin{aligned} & \mathrm{P} 1=3 \\ & \mathrm{P} 2=3+4=7 \\ & \mathrm{P} 3=7+6=13 \\ & \mathrm{P} 4=13+8=21 \\ & \mathrm{P} 5=21+10=31 \\ & \mathrm{P} 6=31+12=43 \\ & \mathrm{P} 7=43+14=57 \\ & \mathrm{P} 8=\mathbf{5 7}+\mathbf{1 6}=\mathbf{7 3} \end{aligned}$ |


| 40. | $\begin{aligned} & \text { a) } \frac{1}{3}=16-20 \text { years } \\ & \frac{2}{3}=25+45+30=100 \\ & \text { Total no. }=\frac{100}{1} \times \frac{3}{2}= \\ & 150 \text { boys } \\ & 16-20 \text { years }=150-100 \\ & \quad=50 \text { boys } \\ & \text { b) } 21-25 \text { yrs }=\frac{30}{150}=\frac{1}{5} \\ & =0.2 \end{aligned}$ |
| :---: | :---: |
|  | pennacool.com Test 3 -Section 1 |
| 1. | 680.46 |
| 2. | $\frac{7}{8}+\frac{6}{8}=\frac{13}{8}=1 \frac{5}{8}$ |
| 3. | $\begin{gathered} 436 \times \\ \hline 49 \\ \hline 17440+ \\ \hline 3924 \\ \hline 21364 \\ \hline \end{gathered}$ |
| 4. | $\begin{aligned} \text { Remaining } & =1000 \mathrm{ml}-250 \mathrm{ml} \\ & =750 \mathrm{ml} \\ \text { Fraction remaining } & =\frac{750 \mathrm{ml}}{100 \mathrm{ml}} \\ & =\frac{3}{4} \end{aligned}$ |
| 5. | $\begin{aligned} 1.2 \mathrm{~kg} & =\frac{1200 g}{200 g} \times \frac{\$ 9.75}{1} \\ & =\$ 9.75 \times 6 \\ & =\$ 58.50 \end{aligned}$ |
| 6. | $\sqrt{144, ~ \sqrt{100}, ~ \sqrt{64}, ~ \sqrt{36}}$ |
| 7. | $\begin{aligned} & 25 \times 9=225=20+(41 \times \square) \\ & 225-20=(41 \times \square) \\ & \square=\frac{205}{41}=5 \end{aligned}$ |
| 8. | $\begin{array}{r} \mathrm{m} \mathrm{~cm} \\ 8145- \\ 6 \quad 80 \\ \hline 265 \\ \hline \end{array}$ |
| 9. | hrs mins $\begin{array}{r} 10: 45+ \\ : 45 \\ \hline 11: 30 \mathrm{am} \\ \hline \end{array}$ |


| 10. |  |
| :---: | :---: |
| 11. | Isosceles triangle |
| 12. | $\begin{aligned} & 2021- \\ & 1998 \\ & \hline 0023 \text { years } \\ & \hline \end{aligned}$ |
| 13. | $\begin{aligned} & 674 \approx 700 \\ & 99 \approx 100 \\ & 700 \times 100=70000 \end{aligned}$ |
| 14. | Area of 1 square $=(2 \mathrm{~cm})^{2}=4 \mathrm{~cm}^{2}$ <br> No. of squares shaded $=5 \frac{1}{2}$ <br> Area $=5 \frac{1}{2} \times 4=\frac{11}{2} \times \frac{4}{1}=22 \mathrm{~cm}^{2}$ |
| 15. | $\begin{aligned} & (6 \mathrm{~cm} \times 4)+(4 \mathrm{~cm} \times 4) \\ & =24 \mathrm{~cm}+16 \mathrm{~cm} \\ & =40 \mathrm{~cm} \end{aligned}$ |
| 16. | $\begin{aligned} \text { Sunil } & =50-(8+12+17) \\ & =50-37 \\ & =13 \end{aligned}$ <br> H\| | | $\mid$ \||| |
| 17. |  |
| 18. | Modal mark $=50$; appears twice for Tests 2 and 5. |
| 19. |  |
| 20. | $\begin{aligned} & 15+12+x=16 \times 3 \\ & 27+x=48 \\ & x=48-27 \\ & =21 \end{aligned}$ |
|  | pennacool.com Test 3 -Section 2 |
| 21. | $\begin{aligned} & \text { Whole }=\$ 60 \times 2=\$ 120 \\ & =33 \frac{1}{3} \%=\frac{1}{3} \times \frac{\$ 120}{1} \\ & =\$ 40.00 \end{aligned}$ |


| 22. | $\begin{aligned} & \text { Girls }=60 \%, \text { Boys } 40 \% \\ & \% \text { Boys attending }=\frac{35}{100} \times \frac{40}{1}=14 \% \\ & \% \text { Total attending }=60 \%+14 \%=74 \% \\ & \% \text { Total absent }=100 \%-74 \% \\ & =26 \% \end{aligned}$ |
| :---: | :---: |
| 23. | $\begin{aligned} & \text { Mathematics }=\frac{80}{100} \times \frac{100}{1}=80 \% \\ & \text { Science }=\frac{60}{80} \times \frac{100}{1}=75 \% \\ & \text { Spelling }=\frac{50}{75} \times \frac{100}{1}=66 \frac{2}{3} \% \\ & \text { Vocabulary }=\frac{55}{60} \times \frac{100}{1}=\frac{275}{3}=91 \frac{2}{3} \% \end{aligned}$ <br> He scored more than $80 \%$ in 1 subject. |
| 24. | $\frac{20}{3} \times \frac{27}{1}=180$ |
| 25. | $\begin{aligned} & \frac{1}{2} \times \frac{\$ 180}{1}=\$ 90=\frac{2}{3} \text { of Liz } \\ & \mathrm{Liz}=\$ 90 \times \frac{3}{2}=\$ 135.00 \end{aligned}$ |
| 26. | $\begin{aligned} & \text { Increase }=\frac{10}{100} \times \frac{\$ 8640}{1}=\$ 864 \\ & \text { New salary }=\$ 8640+\$ 864=\$ 9504.00 \end{aligned}$ |
| 27. | $\begin{aligned} \text { Weight of } \mathrm{B} & =1600 \mathrm{~g}-400 \mathrm{~g} \\ & =1200 \mathrm{~g} \\ \text { Cost of } B= & \frac{1200 \mathrm{~g}}{400 \mathrm{~g}} \times \frac{\$ 9.75}{1}=\$ 29.25 \end{aligned}$ |
| 28. | a) Stall B- 5 mangoes $=\$ 14.60$ <br> 1 mango $=\$ 14.60 \div 5=\$ 2.92$ <br> 3 mangoes $=\$ 2.92 \times 3=\$ 8.76$ <br> b) 4 mangoes $=\frac{4}{8} \times \frac{\$ 22.80}{1}=$ <br> \$) 1.40 mango in Stall $\mathrm{A}=\$ 18 \div 3=\$ 3$ <br> 1 mango in Stall B $=\$ 14.60 \div 5=\$ 2.92$ <br> 1 mango in Stall C $=\$ 22.80 \div 8=\$ 2.85$ <br> Stall C has the best price. |
| 29. | $\begin{aligned} & \text { Sandy }+ \text { Travis }+ \text { Leah }=\$ 290 \\ & \$ 290-\$ 50=\$ 240 \div 3=\$ 80 \\ & \text { Sandy }=\$ 80+\$ 10=\$ 90.00 \\ & \text { Travis }=\$ 80+\$ 40=\$ 120.00 \\ & \text { Leah }=\$ 80.00 \end{aligned}$ |
| 30. |  |


| 31. | Column A |
| :--- | :--- |


| 38. | a) <br> b) Area of combined shape $=$ $\begin{aligned} & 9 \frac{1}{4} \mathrm{~cm}^{2} \times 2 \\ & =18 \frac{1}{2} \mathrm{~cm}^{2} \end{aligned}$ |
| :---: | :---: |
| 39. | $\begin{aligned} & \text { Total no. of students in school }=60 \times 6 \\ & \text { Infant } 1+2=360-(40+50+44+60+55) \\ & \quad=360-249=111 \\ & 111-9=102 \div 2=51 \\ & \text { Infant } 1=51+9=60 \\ & \text { Infant } 2=51 \end{aligned}$ |
| 40. | a) $\begin{aligned} & 5 \_{=}=40 \\ &=\frac{40}{5}=8 \text { bats } \end{aligned}$ <br> b) Store $\mathrm{D}=160-(24+40+32)$ $=160-96=64$ $64 \div 8=8 \text { bats }$ <br> c) Store C sold $=4 \times 8=32$ bats $=\frac{32}{160}=\frac{1}{5}=0.2$ |
|  | pennacool.com Test 4 - Section 1 |
| 1. | Nine thousand and forty-nine dollars and sixteen cents. |
| 2. | $\frac{(8 \times 5)+4}{5}=\frac{44}{5}$ |
| 3. | $\begin{aligned} & 6+3=9, \frac{2}{3}=\frac{6}{9} \\ & \frac{6}{9}+\frac{4}{9}=\frac{10}{9}=1 \frac{1}{9} \\ & 9+1 \frac{1}{9}=10 \frac{1}{9} \end{aligned}$ |
| 4. | $\text { Necklace }=\frac{1}{8} \times \frac{120}{1}=15 \text { seashells }$ |
| 5. | $\begin{aligned} & 25 \phi+10 \phi=35 \phi \\ & \$ 7.00=700 \phi \\ & 700 \phi \div 35 \phi=20 \text { coins } \\ & 20+20=40 \text { coins } \end{aligned}$ |


| 6. | 1, 4, 9, 16, 25, 36 |
| :---: | :---: |
| 7. | $12-6 \frac{7}{8}=5 \frac{1}{8} \mathrm{~m}$ |
| 8. | $\frac{3}{12}$ |
| 9. | $\begin{aligned} & 4 \frac{3}{5} \div \frac{1}{10}=\frac{23}{5} \div \frac{1}{10} \\ & \frac{23}{5} \times \frac{10}{1}=46 \text { tenths } \end{aligned}$ |
| 10. | $\begin{aligned} & \text { Strawberry }=80-(20+10)=50 \\ & \frac{50}{80} \times \frac{100}{1}=62 \frac{1}{2} \% \end{aligned}$ |
| 11. | $\begin{aligned} & \text { Discount }=\frac{10}{100} \times \frac{1800}{1}=\$ 180.00 \\ & \text { Price paid }=\$ 1800-\$ 180=\$ 1620.00 \end{aligned}$ |
| 12. | 406 <br> 4872 <br> $48 \downarrow$ <br> 0072 <br> 72 <br> 00 |
| 13. | There was a remainder because 10 is not a factor of 96 or 96 is not a multiple of 10 . |
| 14. | Yes, she is correct. Both have the same shape but the lengths of the sides are different. |
| 15. | $\begin{aligned} & 10: 25 \mathrm{am}-6: 15 \mathrm{pm}=7 \mathrm{hrs} 50 \mathrm{mins} \\ & 60 \mathrm{mins}=1 \mathrm{hr} \\ & 7 \mathrm{hrs} 50 \mathrm{mins}=7 \frac{50}{60} \mathrm{hrs}=7 \frac{5}{6} \mathrm{hrs} \end{aligned}$ |
| 16. |  |
| 17. | $\begin{aligned} & \text { Mean }=\frac{64+88+36+72}{4} \\ & =\frac{260}{4}=65 \end{aligned}$ |
| 18. | A is a prism while B is a pyramid. |
| 19. | $\begin{aligned} & \text { Turned from SE to } \mathrm{N}=5 \\ & \text { Total }=8 \\ & \text { Fraction }=\frac{5}{8} \end{aligned}$ |

7

| 20. | $\begin{aligned} \text { Reading } & =25-(12+7) \\ & =25-19 \\ & =6 \end{aligned}$ <br> IH\| | |
| :---: | :---: |
|  | pennacool.com Test 4 -Section 2 |
| 21. | $\begin{aligned} & 4 \text { pencils }=\frac{4}{2} \times \frac{1.85}{1}=2 \times 1.85=\$ 3.70 \\ & \text { Total }=\$ 8.67+\$ 2.75+\$ 3.70=\$ 15.12 \\ & \$ 15.12 \approx \$ 15.00 \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Width }=12.7 \div 2=6.35 \\ & \text { Perimeter }=(\mathrm{L}+\mathrm{B}) \times 2 \\ & =(12.7+6.35) \times 2 \\ & =19.05 \times 2 \\ & =38.1 \mathrm{~cm} \end{aligned}$ |
| 23. | $352 \div 8=44-20=24$ |
| 24. | $\begin{aligned} & 1-\left(\frac{1}{9}+\frac{1}{3}\right) \\ & =1-\frac{4}{9}=\frac{5}{9} \end{aligned}$ |
| 25. | $\begin{aligned} & \text { Ryan }=4 x-48, \text { Bina }=x \\ & \text { Ryan spent }=\$ 48=2 x \\ & \text { He had } 2 x \text { remaining } \\ & 2 x=\$ 48 \\ & x=\$ 48 \div 2=\$ 24 \\ & \text { Ryan }=4 \times \$ 24=\$ 96.00 \\ & \text { Bina }=\$ 24.00 \end{aligned}$ |
| 26. | $\begin{aligned} & \text { Bought }=4 \times \$ 6=\$ 24 \\ & \text { Free }=1 \\ & 5 \text { mangoes }=\$ 24 \\ & \text { No. of mangoes }=\frac{\$ 120}{\$ 24} \times 5=25 \end{aligned}$ |
| 27. | $\begin{aligned} & \frac{2}{10}=16 \mathrm{~m} \\ & \text { Whole }=16 \times \frac{10}{2} \\ & =80 \mathrm{~m} \end{aligned}$ |
| 28. | $\begin{gathered} \text { Area }=\mathrm{L} \times \mathrm{B}=25 \mathrm{~cm} \times 18 \mathrm{~cm} \\ =450 \mathrm{~cm}^{2} \\ 2 \text { cut outs }=(12 \mathrm{~cm} \times 6 \mathrm{~cm}) \times 2 \\ =144 \mathrm{~cm}^{2} \\ \text { Area remaining }=450 \mathrm{~cm}^{2}-144 \mathrm{~cm}^{2} \\ =306 \mathrm{~cm}^{2} \end{gathered}$ |
| 29. | $\begin{aligned} & \text { No. of cubes }=5 \times 3 \times 5=75 \\ & \begin{aligned} \text { Volume of cuboid } & =75 \times 8 \mathrm{~cm}^{3} \\ = & 600 \mathrm{~cm}^{3} \end{aligned} \end{aligned}$ |


| 30. |  |
| :---: | :---: |
| 31. | a) <br> b) Equilateral triangle |
| 32. | a) AB and DE <br> b) $B C$ and $C D$ |
| 33. | a) Rhombus <br> b) <br> c) Right-angled triangle |
| 34. | $\begin{aligned} & \text { Total marks in } 4=60 \times 4=240 \\ & \text { Total marks in } 6=66 \times 6=396 \\ & \text { Music }+ \text { Spelling }=396-240=156 \\ & 156-8=148 \div 2=74 \\ & \\ & \text { Spelling }=74 \text { marks } \\ & \text { Music }=74+8=82 \text { marks } \end{aligned}$ |
| 35. | a) <br> b) 2 acute angles and 2 obtuse angles. |
| 36. | a) English <br> b) Social studies because she failed that subject / she made the lowest mark in that subject. |


|  | pennacool.com Test 4 -Section 3 |
| :---: | :---: |
| 37. | $\begin{aligned} & \text { Vanilla }=\frac{4}{9} \times \frac{180}{1}=80 \\ & \text { Chocolate }=180-80=100 \\ & \text { Vanilla sold }=\frac{5}{8} \times \frac{80}{1}=50 \\ & \text { Chocolate sold }=\frac{3}{5} \times \frac{100}{1}=60 \\ & \text { Total sold }=50+60=110 \text { cupcakes } \\ & \text { Unsold }=180-110 \\ & =70 \text { cupcakes } \end{aligned}$ |
| 38. | Shape No. of lines of <br> Symmetry No. of <br> angles $>$ <br> $\frac{1}{4}$ turn |
|  |  |
|  | KiteL |
| 39. | a) P4 <br> b) $\begin{array}{cl} * & P 2=4+3=7 \\ * & * \\ * & P 3=7+3=10 \\ * & P 4=10+3=13 \\ * & P 5=13+3=16 \\ * & \text { P6 }=16+3=19 \\ * & P 7=19+3=22 \\ * & \text { P8 }=22+3=25 \\ * & P 9=25+3=28 \\ * & \text { P10 }=\mathbf{2 8}+\mathbf{3}=\mathbf{3 1} \end{array}$ |
| 40. | Mean sales $\left(\right.$ Jan to Mar) $=\frac{90+60+120}{3}$ $=\frac{270}{3}=90 \mathrm{cars}$ <br> Mean sales $($ Apr to June $)=\frac{30+150+180}{3}$ $=\frac{360}{3}=120 \mathrm{cars}$ <br> Mean car sales increased during the period of April to June. OR The mean car sales from January to March was less than the mean sales from April to June. |
|  | pennacool.com Test 5 - Section 1 |
| 1. | 8015.09 |


| 2. | $\begin{aligned} & 36+9=15 \times \square \\ & 45=15 \times \square \\ & \square=\frac{45}{15}=3 \end{aligned}$ |
| :---: | :---: |
| 3. | $69946=70000$ |
| 4. | $\text { Discount }=\frac{10}{100} \times \frac{\$ 84}{1}=\$ 8.40$ |
| 5. | $\begin{aligned} & \frac{3}{8} \times \frac{24}{1}=9 \\ & =9-4 \\ & =5 \text { squares } \end{aligned}$ |
| 6. | $\begin{aligned} \square & =1-\left(\frac{2}{5}+\frac{1}{2}\right) \\ & =1-\left(\frac{4}{10}+\frac{5}{10}\right) \\ & =1-\frac{9}{10}=\frac{1}{10} \end{aligned}$ |
| 7. | $\begin{aligned} & \text { Sold }=\frac{4}{5} \\ & \mathrm{Had}=\frac{1}{5}=25 \\ & \text { Total }=5 \times 25=125 \end{aligned}$ |
| 8. | $\begin{aligned} & \mathrm{A}=\frac{6}{18}=\frac{1}{3} \\ & \mathrm{~B}=\frac{6}{9}=\frac{2}{3} \\ & \mathrm{C}=\frac{3}{12}=\frac{1}{4} \\ & \mathrm{D}=\frac{1}{3} \end{aligned}$ <br> A and D |
| 9. | $\frac{2.4 \mathrm{~kg}}{400 \mathrm{~g}}=\frac{2400 \mathrm{~g}}{400 \mathrm{~g}}=6 \mathrm{times}$ |
| 10. | Isosceles triangle |
| 11. | $\begin{aligned} & 2018- \\ & 1999 \\ & \hline 0019 \text { years } \\ & \hline \end{aligned}$ |
| 12. | 512, 345, 216, 125, 64, 27 |
| 13. | No. of 500 g weights $=\frac{3 \mathrm{~kg}}{500 \mathrm{~g}}=\frac{3000 \mathrm{~g}}{500 \mathrm{~g}}=6$ No. of weights needed $=6-1=5$ |


| 14. | Triangular prism |
| :---: | :---: |
| 15. | AB and CD or EF and GH |
| 16. | A and B are both prisms. |
| 17. | 8 pencils $=9.7 \mathrm{~cm} \times 8=77.6 \mathrm{~cm}$ |
| 18. | Size 6 |
| 19. | $\begin{aligned} & 20+15+x=16 \times 3=48 \\ & 35+x=48 \\ & x=48-35=13 \end{aligned}$ |
| 20. | $\begin{aligned} & \text { Stephen }=8 \times 20=160 \\ & \text { Julian }=5 \frac{1}{2} \times 20=110 \\ & \text { Difference }=160-110=50 \text { oranges } \end{aligned}$ |
|  | pennacool.com Test 5 -Section 2 |
| 21. | $\begin{aligned} & \text { Rudra }=386 \\ & \text { Kelly }=386-129=257 \\ & \text { Total }=386+257 \\ & =643 \text { marbles } \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Price paid }=\frac{640}{8} \times \frac{\$ 2.50}{1} \\ & =\$ 2.50 \times 80 \\ & =\$ 200.00 \end{aligned}$ |
| 23. | $\$ 100 \times 5=\$ 500 \quad \$ 1 \times 2=\$ 2$ $\$ 50 \times 1=\$ 50$ $\$ 20 \times 1=\$ 20$ $\$ 10 \times 1=\$ 10$ $\$ 5 \times 1=\$ 5$ Total $=5+1+1+1+1+2=11$ TT bills |
| 24. | $\text { Mean }=\frac{24+72}{2}=\frac{96}{2}=48$ |
| 25. | $\begin{aligned} & \text { Perimeter }=36 \times 10 \mathrm{~m}=360 \mathrm{~m} \\ & \text { Width }=(P \div 2)-L \\ & \frac{360 \mathrm{~m}}{2}=180 \mathrm{~m}-95 \mathrm{~m}=85 \mathrm{~m} \end{aligned}$ |
| 26. | $\begin{aligned} & \text { Lunch }+ \text { Snacks }+ \text { Books }=\$ 348 \\ & 3 x+x+\$ 84=\$ 348 \\ & 4 x=\$ 348-\$ 84=264 \\ & x=\frac{\text { Lunch }=3 x}{4}=\$ 66.00 \quad=\$ 198.00 \end{aligned}$ |
| 27. | $\begin{aligned} & 2 / 5 \times \mathrm{J}=1 / 5 \times \mathrm{A} \\ & 2 / 5 \times \$ 200 / 1=1 / 5 \times \mathrm{A} \\ & 1 / 5 \times \mathrm{A}=\$ 80 \\ & \mathrm{Total}=\$ 80 \times 5=\$ 400 \\ & \mathrm{~A}=\$ 400 / \$ 400+\$ 200=\$ 400 / \$ 600 \\ & =\frac{2}{3} \end{aligned}$ |


| 28. | $6-\frac{3}{4}=5 \frac{1}{4}-\frac{3}{4}=4 \frac{1}{2}-\frac{3}{4}=3 \frac{3}{4}$ |
| :---: | :---: |
| 29. | ```Time for activities \(=45 \mathrm{mins}+20 \mathrm{mins}+\) \(40 \mathrm{mins}=105 \mathrm{mins}\) \(105 \mathrm{mins}=1 \mathrm{hr} 45 \mathrm{mins}\) hrs mins 78: \(10^{+60}\) \(\begin{array}{r}\text { - } 1: 45 \\ \hline 6: 25 \mathrm{am} \\ \hline\end{array}\)``` |
| 30. | Store A <br> Price of 1 kg <br> $=\frac{1000 g}{500 g} \times \frac{\$ 8.75}{1}$ <br> $=\$ 17.50$ <br> Store A offers the better deal. The price of 1 kg of sugar is $\$ 2.25$ cheaper than store B. |
| 31. | $\begin{aligned} & \text { 4 notebooks }=\$ 6.75 \times 4=\$ 27.00 \\ & 3 \text { pencils }=\$ 4.50 \times 3=\$ 13.50 \\ & \text { Total }=\$ 27.00+\$ 13.50 \\ & \quad=\$ 40.50 \end{aligned}$ |
| 32. | $\begin{aligned} & 14 \text { T-shirts }=3 \text { sets of } 4 \text { T-shirts }+2 \text { extra } \\ & \text { shirts } \\ & 3 \text { sets of T-shirts }=\$ 290 \times 3=\$ 870 \\ & 2 \text { extra shirts }=\$ 80 \times 2=\$ 160 \\ & \text { Total }=\$ 870+\$ 160 \\ & =\$ 1030.00 \end{aligned}$ |
| 33. | $\begin{aligned} & \text { Mean of } 65+97+x<80 \\ & 65+97+x=79 \times 3 \\ & 162+x=237 \\ & x=237-162=75 \end{aligned}$ <br> His sale on the third day has to be 75 or less. Therefore, he could not have sold 84 magazines on the third day. If 84 magazines was his sales, his mean would have been greater than 80 . |
| 34. | a) <br> b) Hexagon |
| 35. | $\begin{aligned} & \text { Perimeter }=(\mathrm{L}+\mathrm{B}) \times 2 \\ & =(80 \mathrm{~cm}+65 \mathrm{~cm}) \times 2 \\ & =145 \mathrm{~cm} \times 2 \\ & =290 \mathrm{~cm}=2.9 \mathrm{~m} \\ & \text { Cost of } 2.9 \mathrm{~m}=2.9 \times \$ 15 \\ & =\$ 43.50 \end{aligned}$ |


| 36. | Kerron should be chosen because the length of time to complete the 100 m was the best and kept improving. | pennacool.com Test 6 - Section 1 |  |
| :---: | :---: | :---: | :---: |
|  |  | 1. | 9 |
|  | pennacool.com Test 5 -Section 3 | 2. | $\frac{16 \div 8}{72 \div 8}=\frac{2}{9}$ |
| 37. | a) $(70 \times 5)+(75 \times 6)+(80 \times 5)+(90 \times x)=$ 1560 $\begin{aligned} & (350+450+400)+(90 \times x)=1560 \\ & (90 \times x)=1560-1200=360 \\ & x=360 \div 90 \\ & =4 \end{aligned}$ <br> b) $<80$ marks $=5+6=11$ $\%=\frac{11}{20} \times \frac{100}{1}=55 \%$ | 3. | $\begin{aligned} & \frac{3}{8} \\ & \hline \end{aligned}$ |
|  |  | 4. | $\begin{aligned} & \text { Smallest }=17, \text { Largest }=97 \\ & \text { Total }=17+97=114 \end{aligned}$ |
|  |  | 5. | $\frac{15}{40} \times \frac{100}{1}=37 \frac{1}{2} \%$ |
|  |  | 6. | $2400 \mathrm{~g}=2.4 \mathrm{~kg}$ |
| 38. | $\begin{aligned} & \text { a) } \text { Pot }=\frac{1}{8} \\ & \text { Dress }=\frac{1}{2} \times R \end{aligned}$ |  |  |
|  |  | 7. | $\mathrm{B}=12.9+2.6=15.5 \mathrm{~cm}$ |
|  | $\text { Remainder }=\frac{7}{8}$ | 8. | $\frac{9}{30}=\frac{3}{10}$ |
|  | $=\frac{1}{2} \times \frac{1}{8}=\frac{1}{16}$ | 9. | $3 \frac{1}{2} \div \frac{1}{8} \rightarrow \frac{7}{2} \times \frac{8}{1}=28$ glasses |
|  | $\text { Mother spent }=\frac{1}{8}+\frac{7}{16}$ | 10. | 3 quarter turns $=6$ places |
|  | $=\frac{2}{16}+\frac{7}{16}=\frac{9}{16}$ | 11. | $\square=28-(6+11)$ |
|  | $\text { Mother had }=\frac{7}{16}=\$ 560$ | 12. | perpendicular |
|  | $\text { Total }=\frac{\$ 560}{1} \times \frac{16}{7}=\$ 1280.00$ <br> b) $\frac{7}{16} \times \frac{\$ 1280}{1}=\$ 560.00$ | 13. | $\text { Length of } 1 \text { edge }=\frac{156 \mathrm{~cm}}{12}=13 \mathrm{~cm}$ |
|  |  | 14. | $\begin{array}{r} 7.6 \\ \times 5.7 \\ \hline \end{array}$ |
| 39. | $\begin{array}{\|l} \hline 1 \text { ball }+3 \text { rackets }+3 \text { bats }=\$ 240 \\ 1 \text { ball }+7 \text { rackets }+7 \text { bats }=\$ 960 \\ 4 \text { rackets }+4 \text { bats }=\$ 960-\$ 240=\$ 720 \\ 1 \text { racket }+1 \text { bat }=\$ 720 \div 4=\$ 180 \\ x+2 x=3 x=\$ 180 \\ x=\$ 180 \div 3=\$ 60 \\ 1 \text { racket }=\$ 60 \\ 1 \text { bat }=\$ 60 \times 2=\$ 120 \\ 2 \text { rackets }=\$ 60 \times 2=\$ 120 \\ 3 \text { bats }=\$ 120 \times 3=\$ 360 \\ \text { Total }=\$ 360+\$ 120=\$ 480.00 \\ \hline \end{array}$ |  | $\begin{array}{r} 3800 \\ 532 \\ \hline 43.32 \\ \hline \end{array}$ |
|  |  | 15. | $\begin{gathered} 4 \text { 久:00+60 } \\ -\quad: 10 \\ \hline 4: 50 \\ \hline \end{gathered}$ |
|  |  | 16. | $\begin{aligned} & \mathrm{L}=12 \mathrm{~cm}+9 \mathrm{~cm}=21 \mathrm{~cm} \\ & \text { Area }=21 \mathrm{~cm} \times 12 \mathrm{~cm}=252 \mathrm{~cm}^{2} \end{aligned}$ |
|  |  | 17 | C |
| 40. | a) Thursday <br> b) Saved $=\$ 10+\$ 13+\$ 14+\$ 6+\$ 9$ <br> $=\$ 52.00$ <br> c) Cost of bicycle + sneakers $=\$ 575+$ <br> $\$ 361=\$ 936$ <br> No. of weeks $=\$ 936 \div \$ 52=18$ weeks | 18. | Prisms |
|  |  | 19. | $\frac{72}{18}=4 \text { students }$ |
|  |  | 20. | 12.2 seconds |


|  | pennacool.com Test 6 - Section 2 |
| :---: | :---: |
| 21. | $\begin{aligned} & 1-\left(\frac{1}{3}+\frac{4}{9}\right) \\ & =1-\left(\frac{3}{9}+\frac{4}{9}\right) \\ & =1-\frac{7}{9}=\frac{2}{9} \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Greatest no. }=\frac{\$ 300}{\$ 32} \\ & =9 \text { remainder } \$ 18 \\ & =9 \times 4=36 \text { packs } \end{aligned}$ |
| 23. | $\begin{aligned} & \mathrm{A}=4 x, \mathrm{~B}=2 x, \mathrm{C}=x \\ & 4 x+2 x+x=7 x=84 \\ & x=84 \div 7=12 \\ & \mathrm{~A}=4 \times 12=48 \text { members } \\ & \mathrm{B}=2 \times 12=24 \text { members } \\ & \mathrm{C}=1 \times 12=12 \text { members } \end{aligned}$ |
| 24. | $\begin{aligned} & \text { Jenna }=\$ 480 \\ & \text { Harry }=\frac{3}{8} \times \frac{\$ 480}{1}=\$ 180 \\ & \text { Sally }=\$ 180+\$ 48=\$ 228 \\ & \text { Total }=\$ 480+\$ 180+\$ 228=\$ 888.00 \end{aligned}$ |
| 25. | $72,56,42,30,20,12, \mathbf{6}$ <br> The pattern was formed by subtracting 2 less from the proceeding number. |
| 26. | $\begin{aligned} & \text { No. of } 8 \text { seaters }=116=(4 \times 7)+(6 \times 8)+ \\ & (8 \times x) \\ & 116=28+48+(8 \times x) \\ & 116=76+(8 \times x) \\ & (8 \times x)=116-76=40 \\ & 8 \times x=40 \\ & x=40 \div 8=5 \end{aligned}$ |
| 27. | $\begin{aligned} & \text { Dress }=\frac{1}{5} \\ & \text { Remainder }=\frac{4}{5}=(\$ 640 \times 4) \\ & =\frac{4}{5}=\$ 2560 \\ & \frac{5}{4} \times \frac{\$ 2560}{1}=\$ 3200.00 \end{aligned}$ |
| 28. | $\begin{aligned} & \text { Cost of bed }=\$ 975+(\$ 750 \times 9) \\ & =\$ 975+\$ 6750=\$ 7725.00 \end{aligned}$ |
| 29. | $\begin{aligned} & \text { Rai }+ \text { Lester }=\$ 580-\$ 40=\$ 540 \\ & 2 \mathrm{x}+\mathrm{x}=3 \mathrm{x}=\$ 540 \div 3=\$ 180 \\ & \text { Rai }=(\$ 180 \times 2)+\$ 40 \\ & =\$ 360+\$ 40=\$ 400.00 \end{aligned}$ |


| 30. | $\begin{aligned} & \text { No. of tickets }=\frac{80 \mathrm{~cm} \times 60 \mathrm{~cm}}{10 \mathrm{~cm} \times 5 \mathrm{~cm}} \\ & =8 \times 12 \\ & =96 \text { tickets } \end{aligned}$ |
| :---: | :---: |
| 31. | a) $A$ and $B$ are both pyramids. <br> b) A has 5 faces whereas B has 4 faces. A has 8 edges whereas $B$ has 6 edges. A has 5 vertices whereas B has 4 vertices. |
| 32. | Isosceles triangle |
| 33. |  |
| 34. | $\begin{aligned} & \mathrm{A}=(x) \times 4, \mathrm{~B}=(2 x) \times 10 \\ & 4 x+20 x=960 \\ & 24 x=960 \\ & x=960 \div 24 \\ & =40 \\ & \mathrm{~A}=x=40 \text { balls } \\ & \mathrm{B}=2 x=80 \text { balls } \end{aligned}$ |
| 35. | Description ${ }^{\text {a }}$ Angle(s) |
|  | Less than a right <br> angle $\mathrm{a}^{\mathrm{o}}$ and $\mathrm{e}^{\mathrm{o}}$ |
|  | Equal to a right <br> angle $\mathrm{b}^{\mathrm{o}}$ and $\mathrm{c}^{\mathrm{o}}$ |
|  | More than 2 right <br> angles $\mathrm{d}^{\circ}$ |
| 36. | $\begin{aligned} & \text { Mean from Mon }- \text { Sat }=(\$ 380+\$ 160) \div 6 \\ & =\$ 540 \div 6=\$ 90.00 \\ & \text { Mean from Mon }- \text { Fri }=(\$ 40+\$ 80+\$ 50 \\ & +\$ 100+\$ 110) \div 5 \\ & =\$ 380 \div 5=\$ 76.00 \\ & \text { Difference }=\$ 90-\$ 76 \\ & =\$ 14.00 \end{aligned}$ <br> Her mean expenditure increased by $\$ 14.00$. |


|  | pennacool.com Test 6 - Section 3 |
| :---: | :---: |
| 37. | ```Total spent \(=\$ 396\) 6 more Apple pies \(=6 \times \$ 14=\$ 84\) Total cost of 1 cupcake and 1 Apple pie \(=\) \(\$ 12+\$ 14=\$ 26\) No. of each \(=\$ 312 \div \$ 26=12\) Cupcakes \(=12\) Apple pies \(=12+6=18\)``` |
| 38. | $\begin{aligned} & 16 \text { pillars }=16 \times 50 \mathrm{~cm}=800 \mathrm{~cm} \\ & \text { No. of spaces }=15 \times 12.5 \mathrm{~m}=187.5 \mathrm{~m} \\ & 1^{\text {st }} \text { to } 16^{\text {th }} \text { pillar }=800 \mathrm{~cm}+187.5 \mathrm{~m} \\ & =8 \mathrm{~m}+187.5 \mathrm{~m} \\ & =195.5 \mathrm{~m} \end{aligned}$ |
| 39. | a) The carousel made two quarter turns. <br> b) |
| 40. | $\begin{aligned} & \text { a) Larry }=\frac{1}{2} \times \frac{80}{1}=\$ 40 \\ & \text { Savi }=\$ 40+\$ 10=\$ 50 \\ & \text { Suri }=\frac{80}{100} \times \frac{50}{1}=\$ 40+\$ 50=\$ 90.00 \end{aligned}$ <br> b) Mean $=\frac{\$ 40+\$ 50+\$ 80+\$ 90}{4}$ $=\frac{\$ 260}{4}=\$ 65.00$ |
|  | pennacool.com Test 7 - Section 1 |
| 1. | 12,012 |
| 2. | 24 <br> $\times \quad 16$ <br> 240 <br> 144 <br> 384 people |
| 3. | $29.68 \approx 29.7$ |
| 4. | 2.36, 2.63, 2.68, 2.86 |
| 5. | $\frac{20}{100} \times \frac{360}{1}=72$ |
| 6. | $\begin{aligned} & \text { Discount }=\frac{1}{4} \times \frac{\$ 640}{1}=\$ 160 \\ & \text { Price Paid }=\$ 640-\$ 160 \\ & =\$ 480.00 \end{aligned}$ |



| 16. | Cylinder |
| :---: | :---: |
| 17. | $\begin{aligned} & 1 \text { bead }=\frac{480}{20}=24 \\ & \text { bracelet }=24 \times 6 \\ & =144 \text { beads } \end{aligned}$ |
| 18. | $\text { Mean }=\frac{0.3+0.9}{2}=\frac{1.2}{2}=0.6$ |
| 19. | $\text { Mean }=\frac{84+96+76+64}{4}=\frac{320}{4}=80 \text { marks }$ |
| 20. | $\begin{aligned} & \text { Amir }=45-(11+13+7) \\ & =45-31=14 \end{aligned}$ <br>  |
|  | pennacool.com Test 7 - Section 2 |
| 21. | $\begin{aligned} & 3 \frac{4}{5}+2 \frac{7}{10} \\ & 3+2=5 \\ & \frac{4}{5}=\frac{8}{10} \\ & \frac{8}{10}+\frac{7}{10}=\frac{15}{10}=1 \frac{5}{10}=1 \frac{1}{2} \\ & 5+1 \frac{1}{2}=6 \frac{1}{2} \end{aligned}$ |
| 22. | $\begin{aligned} & 16 \text { dozen }=16 \times 12=192 \text { eggs } \\ & \begin{aligned} \text { No. of crates } & =\frac{192}{8} \\ & =24 \text { crates } \end{aligned} \end{aligned}$ |
| 23. | $\begin{aligned} & \text { No. of weeks }=\frac{\$ 76.80}{\$ 4.80} \\ & =\frac{7680}{480} \\ & =16 \text { days } \end{aligned}$ |
| 24. | $\begin{aligned} & \text { Area }=\left(\frac{P}{4}\right)^{2} \\ & =\left(\frac{48 m}{4}\right)^{2}=(12 \mathrm{~m})^{2} \\ & =144 \mathrm{~m}^{2} \end{aligned}$ |
| 25. | $\begin{aligned} & 2 \text { balls }=1 \text { bat } \\ & 6 \text { balls }=3 \text { bats } \\ & 2 \text { bats }+6 \text { balls } \\ & 2 \text { bats }+3 \text { bats }=\$ 980 \\ & 5 \text { bats }=\$ 980 \\ & 1 \text { bat }=\$ 980 \div 5=\$ 196 \\ & 6 \text { bats }=\$ 196 \times 6=\$ 1176.00 \end{aligned}$ |


| 26. | $\begin{aligned} & 1^{\text {st }} \text { shirt }=\$ 160 \\ & 2^{\text {nd }} \text { shirt } \\ & \text { Discount }=\frac{3}{8} \times \frac{\$ 160}{1}=\$ 60 \\ & =\$ 160-\$ 60=\$ 100 \\ & 2 \text { shirts }=\$ 160+\$ 100=\$ 260 \\ & 12 \text { shirts }=\frac{12}{2} \times \frac{\$ 260}{1} \\ & \$ 260 \times 6=\$ 1560.00 \end{aligned}$ |
| :---: | :---: |
| 27 | QUANTITY/ITEM UNIT TOTAL <br>  PRICE PRICE |
|  |  |
|  | 24 eggs 3 for  <br>  $\$ 2.50$ $\mathbf{\$ 2 0 . 0 0}$ |
|  | $5 \frac{1}{2} \mathbf{k g}$ $\$ 12.00$ $\$ 66.00$ <br>  per kg  |
|  | Total $\mathbf{\$ 1 0 9 . 4 0}$ |
|  | $\begin{aligned} & 1 \frac{1}{2} \mathrm{~kg}=\frac{3}{2} \times \frac{\$ 15.60}{1} \\ & =\$ 23.40 \\ & 24 \text { eggs }=\frac{24}{3} \times \frac{\$ 2.50}{1} \\ & =\$ 20.00 \\ & \text { Quantity }=\frac{\$ 66}{\$ 12}=5 \frac{1}{2} \\ & \text { Total }=23.40+\$ 20+66=\$ 109.40 \end{aligned}$ |
| 28. | ```Total runs scored in 5 matches \(=65 \times 4=\) 260 runs Total runs scored in 7 matches \(=80 \times 7=\) 560 runs Runs scored in 3 matches \(=560-260=\) 300 runs \(300-90=210 \div 3=70\) \(5^{\text {th }}\) match \(=70+20=90\) runs \(6^{\text {th }}\) match \(=70\) runs \(7^{\text {th }}\) match \(=70+70=140\) runs``` |
| 29. | Jeet is incorrect. He drew a square-based pyramid which has 5 faces but 8 edges 5 vertices. He should have drawn a triangular prism. |


| 30. | a) Trapezium <br> b) Similarity - both have one pair of parallel sides. <br> Difference - the new shape has two right angles whereas the original shape has no right angles. |
| :---: | :---: |
| 31. | $\begin{array}{\|l} \text { Total no. people }=350 \\ \text { Left }=\frac{1}{5} \times \frac{350}{1}=70 \\ \text { Remained }=350-70=280 \\ \text { Men }+ \text { Women }=280 \\ 3 x+x=280 \\ 4 x=280 \\ x=280 \div 4=70 \\ \text { Men }=3 x=3 \times 70=210 \mathrm{men} \end{array}$ |
| 32. | Length of game $=$ hrs mins <br>  $4 /: 10+60$ <br>  $-3: 20$ <br>  $1: 50$ <br> $1 \frac{1}{2}$ hours $\quad$-20$\quad 1: 30$  |
| 33. | $\begin{aligned} & \text { Pumpkin }=5 \mathrm{~kg} 600 \mathrm{~g}=5.6 \mathrm{~kg} \\ & \text { Watermelon }=4 \frac{3}{4} \mathrm{~kg}=4.75 \mathrm{~kg} \\ & \text { Pawpaw }=3.2 \mathrm{~kg} \\ & \text { Total }=5.6+4.75+3.2=13.55 \mathrm{~kg} \end{aligned}$ |
| 34. |  |
| 35. | $\begin{aligned} & \text { Portugals }=\frac{1}{3}, \text { Rem }=\frac{2}{3} \\ & \text { Apples }=\frac{1}{5} \times \frac{2}{3}=\frac{2}{15} \\ & \text { Plums }=1-\left(\frac{1}{3}+\frac{2}{15}\right) \\ & =1-\left(\frac{5}{15}+\frac{2}{15}\right) \\ & =1-\frac{7}{15}=\frac{8}{15} \\ & \text { Plums }=64=\frac{8}{15} \\ & \text { Total fruits }=64 \times \frac{15}{8}=120 \text { fruits } \\ & \text { Apples }=\frac{2}{15} \times \frac{120}{1}=16 \end{aligned}$ |


| 36. | a) Mean $=\frac{70+50+75+80+76}{5}=\frac{350}{5}=70$ <br> b) $\frac{20}{100} \times \frac{350}{1}=70$ ducklings <br> 70 ducklings sold on Monday |
| :---: | :---: |
|  | pennacool.com Test 7 - Section 3 |
| 37. | $\begin{aligned} & \text { a) } C=2.7 \mathrm{~kg}-(600 \mathrm{~g}+900 \mathrm{~g}) \\ & =2700 \mathrm{~g}-1500 \mathrm{~g} \\ & =1200 \mathrm{~g} \end{aligned}$ $\begin{aligned} & \text { b) } \mathrm{A}=\frac{600 g}{900 g} \times \frac{\$ 42.60}{1}=\$ 28.40 \\ & \mathrm{C}=\frac{1200 g}{600 g} \times \frac{\$ 28.40}{1}=\$ 56.80 \end{aligned}$ |
| 38. | a) <br> b) Parallelogram |
| 39. | $\begin{aligned} & 8 \text { mangoes }+7 \text { pears }=\$ 84.00 \\ & \text { Extra cost of mangoes }=\$ 1.50 \times 8 \\ & (8+7) 15 \text { items cost }=\$ 84-\$ 12 \\ & 15 \text { items }=\$ 72 \\ & 1 \text { item }=\$ 72 \div 15=\$ 4.80 \\ & \text { a) } 1 \text { Mango }=\$ 4.80+\$ 1.50=\$ 6.30 \\ & \text { b) } 1 \text { Pear }=\$ 4.80 \end{aligned}$ |
| 40. | a) Total no. of fruits $=60 \times 5$ 300 fruits <br> b) Day $3+$ Day $4=300-(60+36+60)$ = $300-156=144$ <br> $144-48=96 \div 2=48$ <br> Day $3=48+48=96$ fruits <br> Day $4=48$ <br> Day $3=96 \div 12=8$ cherries <br> Day $4=48 \div 12=4$ cherries |
|  | pennacool.com Test 8 - Section 1 |
| 1. | 408,064 |
| 2. | $7329=7000$ |
| 3. | 0.54 |
| 4. | $\text { Balls }=\frac{4}{18}=\frac{2}{9}$ |



\begin{tabular}{|c|c|}
\hline 28. \& $$
\begin{aligned}
& \text { Sodas }=\$ 5.50 \times 5=\$ 27.50 \\
& H \text { Hotdog }=\$ 12.75 \times 5=\$ 63.75 \\
& \text { Total }=\$ 27.50+\$ 63.7=\$ 91.25 \\
& C \text { Change }=\$ 100-\$ 91.25 \\
& =\$ 8.75 \div 5=\$ 1.75
\end{aligned}
$$ <br>
\hline 29. \& $$
\begin{aligned}
& \frac{1}{2}=40 \\
& \text { Whole }=40 \times 2=80 \\
& \frac{5}{8} \times \frac{80}{1}=50 \\
& \hline
\end{aligned}
$$ <br>
\hline 30. \& $$
\begin{array}{|l|}
\hline \mathrm{S}+\mathrm{M}=75 \\
\mathrm{~S}+\mathrm{M}=75-15=60 \\
2 x+x=60 \\
3 x=60 \\
x=60 \div 3=20 \\
\text { Mark }=20+15=35 \text { cherries }
\end{array}
$$ <br>
\hline 31. \& $\square$
$$
\begin{aligned}
& =\text { hrs mins } \\
& 3: 05^{+60} \\
& -1: 15 \\
& \hline 2: \mathbf{5 0} \\
& \hline
\end{aligned}
$$

$$
\begin{aligned}
& \text { hrs mins } \\
& 3 \mathrm{y}: 05^{+60} \\
& -2: 25 \\
& \hline \mathbf{1 : 4 0} \\
& \hline
\end{aligned}
$$

$$
\begin{array}{r}
\text { hrs mins } \\
2: 25 \\
\times \quad 4 \\
\hline \mathbf{9 : 4 0} \\
\hline
\end{array}
$$ <br>

\hline 32. \& $$
\begin{aligned}
& \text { Cycled }=4 \mathrm{~km} 750 \mathrm{~m} \\
& \text { Ran }=3 \frac{1}{2} \mathrm{~km}=3 \mathrm{~km} 500 \mathrm{~m} \\
& \text { Remaining }=2 \mathrm{~km} 300 \mathrm{~m} \\
& \\
& \mathrm{~km}=4+3+2=9 \mathrm{~km} \\
& \mathrm{~m}=750+500+300=1550 \mathrm{~m} \\
& 1550 \mathrm{~m}=1 \mathrm{~km} 550 \mathrm{~m} \\
& \text { Total distance }=9 \mathrm{~km}+1 \mathrm{~km} 550 \mathrm{~m} \\
& =10 \mathrm{~km} 550 \mathrm{~m}
\end{aligned}
$$ <br>

\hline 33. \& $$
\begin{aligned}
& \hline \mathrm{A}=20 \mathrm{~cm}-13.5 \mathrm{~cm}=6.5 \mathrm{~cm} \\
& \mathrm{~B}=24 \mathrm{~cm}-19 \mathrm{~cm}=5 \mathrm{~cm} \\
& \text { Sum }=6.5 \mathrm{~cm}+5 \mathrm{~cm}=11.5 \mathrm{~cm} \\
& \hline
\end{aligned}
$$ <br>

\hline 34. \&  <br>
\hline 35. \&  <br>
\hline
\end{tabular}

| 36. | $\begin{aligned} & \text { Liza }=162-(36+27+45) \\ & =162-108=54 \end{aligned}$ <br> No. of |
| :---: | :---: |
|  | pennacool.com Test 8 - Section 3 |
| 37. | $\begin{aligned} & \text { Arif }=12 \frac{3}{4} \mathrm{~km}=12 \mathrm{~km} 750 \mathrm{~m} \\ & \text { Marcus }=6 \mathrm{~km} 400 \mathrm{~m}+9 \mathrm{~km} 875 \mathrm{~m} \\ & =16 \mathrm{~km} 275 \\ & \text { One way }=16 \mathrm{~km} 275 \mathrm{~m}-12 \mathrm{~km} 750 \mathrm{~m} \\ & =3 \mathrm{~km} 525 \mathrm{~m} \end{aligned}$ <br> To and from school in one day $=$ $(3 \mathrm{~km} 525 \mathrm{~m}) \times 2=7 \mathrm{~km} 50 \mathrm{~m}$ $5 \text { Days }=(7 \mathrm{~km} 50 \mathrm{~m}) \times 5=35 \mathrm{~km} 250 \mathrm{~m}$ |
| 38. | Justin 48 <br> Kriston $\mathbf{3 6}$ <br> Aaron $\mathbf{5 2}$ <br> Jai $\mathbf{4 4}$$\begin{aligned} & \text { Kriston }=\frac{3}{4} \times \frac{48}{1}=36 \text { years } \\ & \text { Jai }=36+8=44 \text { years } \\ & \text { Aaron }=(45 \times 4)-(48+36+44) \\ & =180-128=52 \text { years } \end{aligned}$ |
| 39. |  |
| 40. | $\begin{aligned} & \text { Travis }=\frac{2}{3} \times \frac{90}{1}=60 \\ & \text { Lee }=(56 \times 5)-(50+90+60+60) \\ & =280-260=20 \end{aligned}$ |
|  | pennacool.com Test 9 - Section 1 |
| 1. | $\begin{aligned} & \text { Value of } 5=50 \\ & =50 \times 60=3000 \end{aligned}$ <br> The digit $\mathbf{3}$ is 60 times greater than the digit 5 |


| 2. | $\frac{35}{8}=4 \frac{3}{8}=4.375$ |
| :---: | :---: |
| 3. | 48 <br> $\times \quad 24$ <br> 960 <br> 192 <br> 1152 mangoes |
| 4. | $\square=35-17=18$ |
| 5. | $\begin{aligned} & \sqrt{ } 144=12 \\ & 9^{2}=81 \\ & 12 \times 81=972 \end{aligned}$ |
| 6. | $\begin{aligned} & \hline \text { Bills }=\$ 76.00 \\ & \text { Coins }=\$ 00.61 \\ & \text { Total }=\$ 76.00+\$ 00.61 \\ & =\$ 76.61 \end{aligned}$ |
| 7. |  |
| 8. | $\begin{aligned} & \frac{1}{3} \times \frac{48}{1}=16 \\ & \%=\frac{16}{48} \times \frac{100}{1}=33 \frac{1}{3} \% \end{aligned}$ |
| 9. | $\text { Saved }=\frac{1}{4} \times \frac{\$ 450}{1}=\$ 112.50$ |
| 10. |  |
| 11. | $6500 \mathrm{~g}=\frac{6500}{1000}=6 \frac{1}{2} \mathrm{~kg}$ |
| 12. | $\begin{aligned} & \text { Numbers } 9-16 \text { : } \\ & 30,40,30,20,10,20,30, \underline{\mathbf{0}} \end{aligned}$ |
| 13. | $\triangle \triangle$ $\square$ $\square$ $\square$ |
| 14. | $\begin{aligned} & \frac{\$ 200}{\$ 28}=7 \text { heaps } \\ & 7 \times 5=35 \text { mangoes } \end{aligned}$ |


| 15. | D |
| :---: | :---: |
| 16. | $\text { Quantity }=\frac{\text { Sum }}{\text { Mean }}=\frac{192}{12}=16$ |
| 17. | Colour Tally Frequency |
|  |  |
|  | Green $\mid$ H\| HW |||| 14 |
|  | Purple H\| |||| 9 |
|  | $\begin{aligned} & \text { Purple }=36-(13+14) \\ & =36-27=9 \end{aligned}$ |
| 18. | Factors of 64 are: $1,2,4,8,16,32,6$ |
| 19. | Std. $2=4=32$ $1 \text { 筙 }=\frac{32}{4}=8$ <br> Std. $4=120-(28+32+36)$ $=120-96=24$ <br> No. of $\frac{24}{8}=3$ |
| 20. | $\begin{aligned} & \text { Mean }=\frac{72+84+96+60+88}{5} \\ & =\frac{420}{5}=84=\text { Test } 2 \end{aligned}$ |
|  | pennacool.com Test 9 -Section 2 |
| 21. | $\begin{aligned} & 6-3=3, \frac{1}{3}=\frac{4}{12} \\ & 2 \frac{4^{+12}}{12}-\frac{11}{12}=2 \frac{5}{12} \end{aligned}$ |
| 22. | $\begin{aligned} & \text { Johnson }=\$ 240 \\ & \text { Anne }=\frac{5}{6} \times \frac{\$ 240}{1}=\$ 200 \\ & \mathrm{Kim}=\$ 200+\$ 95=\$ 295 \\ & \text { Total }=\$ 240+\$ 200+\$ 295=\$ 735.00 \end{aligned}$ |
| 23. | $\frac{736}{36}=20 \text { cases rem. } 16$ <br> She is packing the $21^{\text {st }}$ case. |
| 24. | $\begin{aligned} & \text { Length of time worked }=6 \mathrm{hrs} 40 \mathrm{mins} \\ & \text { No. of lawns mowed }=\frac{6 \mathrm{hrs} 40 \mathrm{~min}}{40 \mathrm{~min}} \times 2 \\ & =\frac{400 \mathrm{~min}}{40 \mathrm{~min}} \times 2=20 \text { lawns } \\ & \text { Money earned }=20 \times \$ 75=\$ 1500.00 \end{aligned}$ |


| 25. | Rhombus or Parallelogram |  |
| :---: | :---: | :---: |
| 26. | $=\frac{402}{6}=67 \%$ <br> She passed the tests. |  |
| 27. | $\begin{aligned} & \text { Factory } A=75 \times 6=450 \text { cars } \\ & \text { Factory } B=50 \times 6=300 \text { cars } \\ & \text { Difference }=450-300 \\ & =150 \text { cars } \end{aligned}$ |  |
| 28. | $\begin{aligned} & \text { Difference }=4 \text { bracelets }+4 \text { pairs of } \\ & \text { earrings }=\$ 1436-\$ 796 \\ & =\$ 640 \\ & 1 \text { bracelet }+1 \text { pair of earrings }=\$ 640 \div 4 \\ & =\$ 160.00 \end{aligned}$ |  |
| 29. | Width of 40 pillars $=40 \times 0.3=12.0 \mathrm{~m}$ <br> No. of spaces between pillars $=40-1=39$ <br> Distance between spaces $=39 \times 4=156 \mathrm{~m}$ <br> Distance from $1^{\text {st }}$ to last pillar $=156 \mathrm{~m}+$ $12 \mathrm{~m}=168 \mathrm{~m}$ |  |
| 30. | a) |  |
|  |  | Time in Seconds |
|  |  | 18.9 |
|  |  | 24.6 |
|  |  | 18.7 |
|  |  | 22.5 |
|  |  | 21.2 |

b) Sati $=22.5$ secs -3.8 secs $=18.7$ secs

Brenda $=18.9$ secs +2.3 secs $=21.2$ secs
Sati won the race.
31. Dena got the larger piece. $\frac{1}{4}$ is equivalent to $\frac{2}{8}$. Therefore Dena, who got $\frac{3}{8}$, got a larger piece than Kelly who got $\frac{1}{4}$ which is equal to $\frac{2}{8}$.
32. A has 2 lines of symmetry and 0 right angles whereas B has 4 lines of symmetry and 4 right angles.
33. 15 barrels $=15 \times 30$ litres $=450$ litres

No. of buckets $=\frac{450 \mathrm{~L}}{500 \mathrm{ml}}=\frac{450000 \mathrm{ml}}{\mathrm{ml}}$
$=900$ buckets
Length of time $=900 \times 8$ mins
7200 mins
Time in hours $=\frac{7200}{60}=120$ hours
34. a)

b) Octagon
35.
36. Savings

Monday $=\$ 40-\$ 25=\$ 15$
Tuesday $=\$ 40-\$ 32=\$ 8$
Wednesday $=\$ 40-\$ 28=\$ 12$
Thursday $=\$ 40-\$ 15=\$ 25$
Friday $=\$ 40-\$ 36=\$ 4$
Mean $=$ Sum $\div$ Quantity
$=\frac{\$ 15+\$ 8+\$ 12+\$ 25+\$ 4}{5}$
$=\frac{\$ 64}{5}=\$ 12 \frac{4}{5}$
$=\$ 12.80$
pennacool.com Test 9 - Section 3
37. 3 microwaves $=\$ 1200 \times 3=\$ 3600$
$4^{\text {th }}$ microwave $=\frac{60}{100} \times \frac{\$ 1200}{1}=\$ 720$
Total cost of 4 microwaves $=\$ 3600+$
\$720
= \$4320
Total cost of 12 microwaves $=\frac{12}{4} \times \$ 4320$
= \$12960

|  | Toaster <br> Discount $=\frac{1}{3} \times \frac{\$ 630}{1}=\$ 210$ <br> Price of 1 toaster $=\$ 630-\$ 210=\$ 420$ <br> Price of 5 toasters $=\$ 420 \times 5=\$ 2100$ <br> Total cost $=\$ 12960+\$ 2100=\$ 15060.00$ |
| :---: | :---: |
| 38. | $\begin{aligned} & \text { Mark }+ \text { Sally }+ \text { Jen }=\$ 840 \\ & \$ 840-\$ 330=\$ 510 \div 3=\$ 170 \\ & \text { Mark }=\$ 170+\$ 210=\$ 380 \\ & \text { Sally }=\$ 170+\$ 120=\$ 290 \\ & \text { Jen }=\$ 170 \\ & \text { Mean }=\frac{\$ 840}{3}=\$ 280 \\ & \text { Mark must give }=\$ 380-\$ 280=\$ 100.00 \\ & \text { Sally must give }=\$ 290-\$ 280-\$ 10.00 \end{aligned}$ |
| 39. | a) P 4 <br> b) $\begin{aligned} & \mathrm{P} 1=5 \\ & \mathrm{P} 2=5+4=9 \\ & \mathrm{P} 3=9+4=13 \\ & \mathrm{P} 4=13+4=17 \\ & \mathrm{P} 5=17+4=21 \\ & \mathrm{P} 6=21+4=25 \\ & \mathrm{P} 7=25+4=29 \\ & \mathrm{P} 8=29+4=33 \\ & \mathrm{P} 9=33+4=37 \\ & \mathrm{P} 10=37+4=41 \\ & \mathrm{P} 11=\mathbf{4 1}+\mathbf{4}=\mathbf{4 5} \end{aligned}$ |
| 40. | $\begin{aligned} & \text { Length }=6 \text { cubes } \\ & \text { Breadth }=5 \text { cubes } \\ & \text { Height }=5 \text { cubes } \\ & \text { No. of cubes to fill cuboid }=6 \times 5 \times 5 \\ & =150 \text { cubes } \\ & \text { No. of cubes needed }=150-(5+6+4) \\ & =150-14=136 \text { cubes } \end{aligned}$ |
|  | pennacool.com Test 10 - Section 1 |
| 1. | $\begin{array}{\|ccccccc} \hline \text { HTh } & \text { TTh } & \text { Th } & \text { H } & \text { T } & \text { O } & \frac{1}{10} \\ 6 & 8 & 0 & 9 & 0 & 5.8 \\ 680,905.8 & & & & & \end{array}$ |
| 2. | 5,672 |
| 3. | $9 \xlongequal{0.0806}$ |
| 4. | $\frac{(3 \times 8)+7}{8}=\frac{31}{8}$ |


| 5. | $\begin{aligned} & 7-5=2 \\ & 1 母 \frac{2}{3}-\frac{5}{6} \\ & 12\left(\frac{4}{6}+\frac{6}{6}\right)-\frac{5}{6} \\ & \frac{10}{6}-\frac{5}{6}=1 \frac{5}{6} \end{aligned}$ |
| :---: | :---: |
| 6. | 666.66 |
| 7. | < |
| 8. | $\frac{60}{100} \times \frac{540}{1}=324$ |
| 9. | $\begin{aligned} & \text { He needs }=\$ 129.95-\$ 85.65 \\ & =\$ 44.30 \end{aligned}$ |
| 10. | metres |
| 11. |  |
| 12. | 9.06 m |
| 13. | $\begin{aligned} & 9 \mathrm{~N}: 10+60 \\ & -5: 40 \\ & \hline \frac{4: 30}{4 \text { hours } 30 \text { mins }} \end{aligned}$ |
| 14. | C |
| 15. | 3 quarter turns |
| 16. | $\begin{aligned} & \text { Sum }=\text { Mean } \times \text { Quantity } \\ & =35 \times 6=210 \end{aligned}$ |
| 17. | Triangular-based pyramid |
| 18. | $\frac{72 \mathrm{~m}}{60 \mathrm{~cm}}=\frac{720 \mathrm{~cm}}{60 \mathrm{~cm}}=12 \text { bows }$ |
| 19. | Police Drama |
| 20. | $\begin{aligned} & \text { Average }=\frac{51+39+46+34+40}{5} \\ & =\frac{210}{5}=42 \mathrm{~kg} \end{aligned}$ |


|  | pennacool.com Test 10 - Section 2 |
| :---: | :---: |
| 21. | $\text { No. of each } \operatorname{tin}=\frac{60}{(6+4)}=6$ |
| 22. | $\begin{aligned} & \mathrm{A}=4.5 \\ & \mathrm{~B}=6.7 \\ & \mathrm{C}=8.3 \\ & \text { Total }=4.5+6.7+8.3=19.5 \end{aligned}$ |
| 23. | No. of hours $=\frac{\$ 540}{\$ 45}=12$ hours |
| 24. | $\begin{aligned} & \text { Shirt + Tie }=\$ 276.80 \\ & \$ 276.80-\$ 42.60=\$ 234.20 \div 2=\$ 117.10 \\ & \text { Shirt }=\$ 117.10+\$ 42.60=\$ 159.70 \end{aligned}$ |
| 25. | $\begin{aligned} & \mathrm{CP}=\$ 4050 \\ & \mathrm{SP}=\frac{50}{100} \times \frac{\$ 4050}{1}=\$ 2025+\$ 4050 \\ & =\$ 6075 \\ & 9 \text { bicycles were sold for }=\$ 6075 \\ & 1 \text { bicycle }=\$ 6075 \div 9 \\ & =\$ 675.00 \end{aligned}$ |
| 26. | $\begin{aligned} & \text { Watermelon }=30 \% \\ & \text { Pawpaw }=70 \% \\ & \text { Pawpaw sold }=\frac{60}{100} \times \frac{70}{1}=42 \% \\ & \% \text { sold }=30 \%+42 \%=72 \% \end{aligned}$ |
| 27. | Green $=32+15=47$ <br> Yes, green is now the modal colour because green is the favourite colour of most of the children. |
| 28. | $\begin{aligned} & \mathrm{CP}=\$ 480 \\ & \mathrm{SP}=(80 \mathrm{~kg}-10 \mathrm{~kg}) \times \$ 8 \\ & =70 \mathrm{~kg} \times \$ 8=\$ 560 \\ & \text { Profit }=\mathrm{CP}-\mathrm{SP} \\ & =\$ 560-\$ 480 \\ & =\$ 80 \end{aligned}$ <br> He made a profit of $\$ 80.00$. $\mathrm{SP}>\mathrm{CP}$. |
| 29. | $\begin{aligned} & \text { Area of } 1 \text { square }=(4 \mathrm{~cm})^{2}=16 \mathrm{~cm}^{2} \\ & \text { No. of squares shaded }=12 \frac{1}{2} \\ & \text { Area }=12 \frac{1}{2} \times 16=200 \mathrm{~cm}^{2} \end{aligned}$ |
| 30. | Using $\$ 200$ for Arya: $\begin{aligned} & \frac{1}{2} \times \frac{\$ 200}{1}=\$ 100 \\ & \text { Anil }=\$ 100 \times 4=\$ 400 \\ & \text { Anil's fraction }=\frac{400}{600}=\frac{2}{3} \end{aligned}$ |


| 31. | $\begin{aligned} & 1 \text { ball }=\$ 30 \\ & 6 \text { balls }=\$ 30 \times 6=\$ 180 \\ & \$ 180 \text { will get you } 8 \text { balls } \\ & \text { Cost of } 48 \text { balls }=\frac{48}{8} \times \$ 180=\$ 1080.00 \end{aligned}$ |
| :---: | :---: |
| 32. |  |
| 33. | One similarity is that they both have 5 faces. One difference is that A has 5 vertices while B has 6 vertices. |
| 34. | Shape $\quad$ Property |
|  | sisers parallel |
| 35. | a) Mean $=\frac{80+60+90+50+70+70}{6}$ $=\frac{420}{6}=70$ marks, Liz and Gina <br> b) $\frac{2}{6} \times \frac{100}{1}=33 \frac{1}{3} \%$ |
| 36. |  |
|  | pennacool.com Test 10 - Section 3 |
| 37. | $\begin{aligned} & \text { a) Area of walkway }=(100 \mathrm{~m} \times 90 \mathrm{~m})- \\ & (90 \mathrm{~m} \times 80 \mathrm{~m}) \\ & =9000 \mathrm{~m}^{2}-7200 \mathrm{~m}^{2} \\ & =1800 \mathrm{~m}^{2} \\ & \text { b) No. of light poles }=\text { Perimeter } \div 19 \mathrm{~m} \\ & =(100 \mathrm{~m}+90 \mathrm{~m}) \times 2=190 \mathrm{~m} \times 2 \\ & =380 \mathrm{~m} \div 19 \mathrm{~m}=20 \text { light poles } \end{aligned}$ |

\(\left.\left.\left.$$
\begin{array}{|l|l|}\hline \text { 38. } & \begin{array}{l}5 \text { mops }+7 \text { brooms }=\$ 855 \\
1 \text { mop costs } \$ 15 \text { more } \\
5 \text { mops cost }=\$ 15 \times 5=\$ 75 \\
(5+7)=12 \text { items }=\$ 855-\$ 75 \\
12 \text { items }=\$ 780 \\
1 \text { item }=\$ 780 \div 12=\$ 65 \\
\text { a) } 1 \text { mop }=\$ 65+\$ 15=\$ 80.00 \\
\text { b) } 1 \text { broom }=\$ 65.00\end{array} \\
\hline 39 . & \text { a) } \\
\text { b) Each shape had one side more than the } \\
\text { preceding shape } \\
\text { c) Heptagon }\end{array}
$$\right\} $$
\begin{array}{l}\text { d) Decagon }\end{array}
$$\right\} \begin{array}{l}a) Sum=Mean \times Quantity <br>
=60 \times 5 <br>
=300 peppers <br>
Wednesday=300-(30+60+70+80) <br>
=300-240 <br>

=60\end{array}\right\}\)| b) $\frac{300}{10} \times \frac{\$ 7.50}{1}=\$ 225.00$ |
| :--- |

## LANGUAGE ARTS ANSWER SHEET

## pennacool.com TEST 1

1. whether- weather
2. expeckted- expected
3. treatening- threatening
4. climactic- climatic
5. amplifyed- amplified
6. drouths- droughts
7. Alexis,
8. community:
9. Alexis'
10. individual.
11. Her
12. they?
13. have- has
14. base- basic
15. became- become
16. virtual- virtually
17. because-
however
18. between- among
19. The howler monkey has short snouts and wide-set, round nostrils. Their noses are usually roundish snouttype, and the nostrils have many sensory hairs growing from the interior. They range in size from 56 to 92 cm ( 22 to 36 in ). Their tails can be up to five times the length of their bodies.
20. Yes, the monkeys are suitably named because they are famous for their loud howls which can travel 5 km through the dense forest.
21. I think this means that the howler monkeys move about on the treetops using all four limbs.
22. Two other words used to refer to the howler monkeys are primates and hominoids.
23. The howling is used by the monkeys for territory protection and to guard their mates.
24. They are removed to be kept as pets by human beings.
25. I think baby howlers should not be removed from their natural habitats because this practice could lead to the extinction of the species and because they can spread diseases to humans who keep them as pets. One measure to protect them is building reserves / imposing heavier fines.
26. The poet asked for a tiger and a cobra.
27. The poet told his father that they could feed his brother to the tiger.
28. The poet's father became impatient and angry.
29. No, I do not think the poet really wanted a tiger or a cobra. The poet really wanted the kitten for his pet however, he knew that his father would not immediately agree to the request, so he started out by asking for dangerous creatures as pets.
30. Yes, the strategy was a good one because the poet's father felt so relieved when he asked for a kitten instead of the tiger or cobra that he immediately agreed to get the kitten that he really wanted.
31. I think the poet was an intelligent child. He was a creative thinker and knew exactly how to get what he wanted.
32. A suitable title for the poem is: The Perfect Strategy. (Teacher's discretion)
33. The name of the company is hungerpangs.com and it offers food delivery to your home.
34. 35. Free home delivery 2 . Drivers observe all Health and safety protocols.
1. Biodegradable containers are containers that can disintegrate or breakdown by natural processes. It is important because biodegradable items do not contribute to pollution which is a major problem in today's world.
2. 3. Use their app. 2. Contact via cellphone 200-2000

## pennacool.com TEST 2

1. Tresure- Treasure
2. demulished- demolished
3. Zoo
4. namely:
5. most kind- kindest 14. puts- put

Leaders in Online Education
3. emprisoned- imprisoned
9. 1952,
15. rely- relied
4. conected- connected
10. Tobago's
16. with- on
5. trails- trials
11. Savannah.
17. they- them
6. persistance- persistence
12. it!
18. because- and
19. We use our mouth and teeth to smile, talk, frown and eat.
20. The mouth is essential to speech because together with the lips and tongue, the teeth help form words by controlling airflow out of the mouth. The tongue strikes the teeth or the roof of the mouth as sounds are made.
21. a) important, necessary. b) produce.
22. The soft palate forms a curtain between the mouth and the throat, or pharynx, to the rear. When we swallow our food, the soft palate closes off the nasal passages from the throat to prevent food from entering the nose.
23. When we consume food, salivary glands in the walls and floor of the mouth secrete saliva (spit), which moistens the food and helps break it down even more as we chew it. Saliva makes it easier to chew and swallow foods and contains enzymes that help begin the digestion of foods. Once food is a soft, moist mass, it's pushed to the back of the mouth and the throat to be swallowed.
24. A smoke-free zone is an area that is free from smoke caused by the smoking of cigarettes by people. It is important to keep our homes and cars smoke free to keep our mouth and teeth healthy and to prevent cancer. 25. I think a mouth guard is recommended during sporting activities to prevent us from suffering injuries to our mouth and teeth.
26. The poet ignored proper dental hygiene. She never looked after her teeth and consumed a lot of sugary snacks. This led to the poet developing a lot of cavities and having to endure the pains from fillings at the dentist's office.
27. The mood in the first stanza is one of regret/remorse. The poet expressed her regret for not looking after her teeth properly because she had developed a lot of cavities.
28. My conscience gets horribly pricked means that the poet feels very guilty when she reflects on the variety of sweets she consumed over the years.
29. Another word used to refer to teeth is choppers.
30. I think the poet repeated the line to emphasize her regret for not practicing proper dental hygiene and to encourage others to look after their teeth properly.
31. The poet experienced fear. A line to support my answer is: And I gazed up his nose in despair.
32. The poet's mother was telling her that her tooth was like a friend. You have to take care of it properly if you want it to last/stay strong.
33. You will find a poster like the one above in a dentist's office because it deals with dental care.
34. 1) Brush teeth regularly. 2) Floss. 3) Visit the dentist for check-ups.
35. Two things that may have attracted her to the office are the $25 \%$ discount and the Free X-Rays and Polishing.
36. It is necessary to visit the dentist regularly so that the dentist can examine your teeth properly to ensure that your teeth are healthy and to attend to any cavities that may have developed because of improper personal care of the teeth.

## pennacool.com TEST 3

1. mamals- mammals
2. nockturnal- nocturnal
3. cretures- creatures
4. manovre- manoeuvre
5. fertelizers- fertilizers
6. day,
7. hungry.
8. The
9. Mr. Fox's
10. am!
11. frustrated- frustration
12. friend- friends
13. their- his
14. and- to
15. and- because
16. Sanders was born in 1890 in Henryville, Indiana.
17. When Sanders was six years old, his father passed away leaving him with the responsibility to cook and care for his siblings. He dropped out of school and left home to go work as a farmhand to provide for his siblings.
18. As a young man, Sanders was an aggressive and headstrong individual. The passage stated that he lost jobs because of fighting and because of his refusal to comply with orders.
19. The line means that despite his many attempts to succeed, he could not. I think the writer was sympathetic towards Sanders.
20. Two characteristics he displayed were determination and perseverance. Despite the many hardships he suffered, he never quit trying to succeed. He persevered until he succeeded.
21. a) overwhelmed. b) argument.
22. The lesson you can learn from Sanders is that if at first you don't succeed, try again. You should never allow hardships and difficulties to become obstacles in your journey to success.
23. 24) How to run the nation. 2) Capture thieves.
1. The line from the poem that tells that the poet's father deals with matters as they arise is: But grabs it while it's hot.
2. The poet thinks that his father does a lot of talking and can solve the problems of the world but is unable to perform simple tasks.
3. The poet's mother is the one responsible for settling matters with the neighbours. The line to support my answer is: But when the neighbours start a fuss, Tis' mother has to fight it.
4. The meaning of tumult is confusion.
5. The mood of the poem is one of humour.
6. The lines mean that the poet's father is good at giving advice on matters related to the financial situation of the country but has great difficulty in paying his own bills in a timely manner.
7. 8) Soccer Night 2) Sports Camp
1. No, he cannot visit the store to purchase. It is an online store so he can order online at www.innokids.com or call 1-868-400-4000.
2. Warnings have been included so that parents could monitor the amount of time children spend on video games to prevent children from being negatively affected.
3. The coupon must be detached from the advertisement, scanned and emailed or Whatsapp to get a discount.

## pennacool.com TEST 4

1. Choral- Coral
2. suposedly- supposedly
3. nutreints- nutrients
4. shelthers- shelters
5. consavation- conservation
6. chalenges- challenges
7. Bird
8. All
9. Nanan,
10. Simon O.
11. man!
12. Bird's
13. IndependenceIndependent
14. chose- chosen
15. by- from
16. is- are
17. whom- who
18. in- into
19.They all have a narrow waist that segments their body. The body is separated into three parts: the head, thorax, and gaster.
19. I think the statement was made so that the reader would better be able to understand/visualize exactly how strong the ants are.
20. Foraging means searching for food.

Leaders in Online Education
22. The ant population is described as being stable because it is not in danger of becoming extinct.
23. When the eggs hatch, the new ants become the "slave" ants for the colony and are required to take care of the eggs and babies, gather food for the colony and build the anthills or mounds.
24. Ants aerate the soil and act as decomposers by feeding on organic waste, insects and other dead animals.
25. I think the queen is the most important type of ant in the colony. The passage states that the queen is protected by the soldiers, is rarely ever replaced and when she dies, the colony does not survive for more than a few weeks.
26. The families that stick together are the happiest types of families.
27. The line tells us that the bond between the family members is so strong that external forces cannot break it. The family can only be separated by death.
28. The literary device used is personification.
29. Some families separate to journey elsewhere in search of a better life however they experience hardships and loneliness because of the lack of love of family members. The lines to support my answer are: Each goes searching after pleasure in his own selected way, But it's bitterness they harvest, and it's empty joy they find.
30. The people who easily separate from their families are those who think that they are wise.
31. Two words in the poem that are similar in meaning are wander and roam.
32. I think the poet thinks that the extended type of family is the best because of the love and support they offer each other.
33. A Virtual Parenting Workshop is being advertised by Families in Action.
34. During the pandemic, many children are taken care of by their grandparents because they attend school virtually while their parents are at work. This workshop will provide grandparents with strategies to look after their grandchildren.
35. He should attend the Parenting for men Workshop from 16th August to 1st September, 2021.
36. I think the event had sponsors so that the cost of hosting the event could be covered by them.

## pennacool.com TEST 5

$\left.\begin{array}{lll}\text { 1. Vacinnes- Vaccines } & \text { 7. there? } & \begin{array}{l}\text { 13. developing- } \\ \text { development }\end{array} \\ \text { 2. oganisms- organisms } & \text { 8. It's } & \text { 14. best- better } \\ \text { 3. weekened- weakened } & \text { 9. kitchen, } & \text { 15. is- are } \\ \text { 4. heard- herd } & \text { 10. of. } & \text { 16. himself- } \\ \text { themselves }\end{array}\right\}$
19. 1) He was the son of an indentured labourer. 2) He lived in Cunupia.
20. He worked as a part time farmer in the sugar cane plantations and hunted and fished in the Caroni Swamp.
21. No, education was not a priority because he took his ten-year old son out of school to help develop his boat tour business.
22. I think they were concerned about the Scarlet Ibis because it was being hunted indiscriminately and its population was decreasing.
23. Simon and Winston collected over 200 signatures of people, many of whom were influential, on a petition and sent it to the Conservator of forests for attention. This resulted in the creation of the Caroni Bird Sanctuary.
24. a) premier b) enhanced

Leaders in Online Education
25. The Caroni Bird Sanctuary is referred to as a National Treasure because it is the largest wetland in Trinidad and Tobago and is the habitat of our National Bird, the Scarlet Ibis and a wide variety of flora and fauna. It is also a popular tourist destination.
26. The problems a person might face are low income, increasing debt and failure.
27. It means that life is unpredictable and we can never be sure what challenges we may have to face on a daily basis.
28. The lines from the poem are: So stick to the fight when you're hardest hit - It's when things seem worst that you must not quit.
29. I think the poet says that success is failure turned inside out because when we fail at things, we learn valuable lessons, lessons which we can use in the future to achieve success.
30. The mood of the poem is one of perseverance.
31. Yes, I think it is a suitable title because the poet's message throughout the poem is that despite the difficulties/challenges you may face in life, you should never quit.
32. The other advice given by the poet is to rest. I think that advice was given because when we are faced with problems, we feel frustrated and exhausted. Resting gives you an opportunity to tackle the issue with renewed vigour.
33. Razzle and Dazzle posted the advertisement to advertise their opening of the store.
34. 1) Free giveaways. 2) Low prices. 3) Refreshments.
35. Yes, I think it is a suitable time because people usually purchase gifts for their mothers at that time so it will boost sales.
36. No, the advertisement stated: Sale on selected gold items (earrings and rings), bracelets, are not included in the sale.

## pennacool.com TEST 6

| 1. consumtion- consumption | 7. 'sweet tooth'? | 13. encounters- <br> encounter |
| :--- | :--- | :--- |
| 2. atificial- artificial | 8. like: | 14. his- their |
| 3. sweetners- sweeteners | 9. Drug | 15. man-make- man- <br> made |
| 4. addicktion- addiction | 10. foods. | 16. vary- varied |
| 5. deficincies- deficiencies | 11. don't | 17. wise- wisely |
| 6. nutritous- nutritious | 12. consume; | 18. and- because |

19. The labourers were taken from Bihar and Uttar Pradesh and they worked as labourers and planted crops.
20. I think most of the immigrants were from the 20-30 year age group because they were young and would be able to endure the long hours of working and perform the strenuous work on the sugar-cane plantations when they arrived in Trinidad.
21. The immigrants were cramped into the ship. They suffered from cholera, typhoid, dysentery and measles and many of them died on the way.
22. When they arrived in Trinidad, they were quarantined on Nelson's Island and then assigned to different estates to work. They were contracted to work for a period of five-years on the estate.
23. I think they were quarantined to ensure that they did not have any infectious or contagious diseases that could be spread to the estate owners and their families.
24. In order to qualify for the free return passage back to India, the Indian had to re- indenture himself for a
further five years or return at one's own expense.
25. Qualities they may have possessed are: determination, perseverance, dedication and commitment.
26. In the first stanza of the poem, the poet is describing the start of a storm that occurred the previous night. Torrential down pour accompanied by lightning caused the animals to flee for shelter to get away from the onslaught of the storm.
27. The literary device used throughout the poem is personification. The line which best describes the effects of the flood is: Grabbing everything in sight with a royal flush.
28. A long path of destruction in its shadow means that after the storm has passed, the destruction it caused is very evident.
29. Belligerent means aggressive/destructive.
30. The people feel sad and helpless because they are unable to do anything to stop the destruction caused by the storm. The line to support my answer is: Humans watch helplessly, eyes wide with doubt.
31. A simile used in the poem is: Like baby tornadoes whirling and twirling. The poet used the comparison because the flood water was moving in a similar manner to that of a tornado which moves in a rapid, spiralling motion.
32. The poet thinks that the flooding is caused by the hasty actions of people. Two ways by which people may be responsible for flooding are the indiscriminate disposal of garbage in rivers and drains and the clearing of hillsides for planting and constructing homes.
33. The purpose of this poster is to educate consumers about their rights and duties so that retailers would not be able to engage in unfair practices.
34. Consumers should know their rights because if they purchase inferior products, they must know what they can do to get compensated.
35. If an item has to be returned because of damage etc, the vendor will use the bill as a proof of purchase.
36. She should report her grievance to the Ministry of Consumer Affairs.

## pennacool.com TEST 7

| 1. Corporation- Co-operation | 7. friend, | 13. easier- easiest |
| :--- | :--- | :--- |
| 2. elementry- elementary | 8. attitude," | 14. who- whom |
| 3. atain- attain | 9. Mary J. | 15. disregard- <br> disregarded |
| 4. assisstance- assistance | 10. pleading, | 16. with- of |
| 5. soceity- society | 11. Alas! | 17. irregardless- <br> regardless |
| 6. desputes- disputes | 12. Constable | 18. nothing- anything |

19. Spidey had spent the morning weaving a web that he hoped would ensnare his next meal.
20.Spidey: Spidey can best be described as cunning because he used a lot of flattery to lure Mrs. Fly into his parlor.
Mrs. Fly: Mrs. Fly can be described as vain because she believed all the flattering remarks made by Spidey in his attempts to catch her.
21.No. Mrs. Fly was not witty and wise because although she initially refused to fall prey to his compliments, she eventually began trusting him.
20. Yes, Spidey realised that she was becoming trapped because he returned into his parlor and made preparations for her visit. He spun another web and laid his table for his meal.
23.Mrs. Fly was fooled by the excessive compliments given to her by Spidey and fell prey to him.

Leaders in Online Education
24.Deterred means discouraged.
25.The moral of the story is important to children because it tells children that they should not allow themselves to be fooled by flattery from strangers because they could end up in trouble.
26.A mother is speaking to her son in the poem.
27.The poet had a very difficult life filled with struggles. A line to support my answer is: And life for me ain't been no crystal stair.
28.I think the splinters and the tacks were the many obstacles faced by the poet during her life.
29. No, the poet did not allow the obstacles to deter her because she stated that she continued to climb on her journey.
30.I think the message the poet wants to convey is that in life, he will face many difficulties and hardships but he must not give up. He must continue finding ways to overcome the many challenges.
31.A word to best describes the poet's attitude is optimistic/persistent.
32.The mother may have decided to give this message to her son because she probably realised that he was encountering difficulties in his own life and he may be giving up. She shared her life experiences to motivate him so that he could understand that life is not easy and he must face the struggles.
33.This is called a flow chart and it shows the milk production process.
34.The milk is heated and cooled to make sure it is germ free. This is an important process because the consumer can get ill if the germs are not removed from the milk.
35.The wholesalers sell the milk to the retailer who in turns sells to the consumers.
36. Yes, I think using a flow chart is a good way because it effectively shows the step-by- step process of how milk is processed and helps the reader to visualize the process better.

## pennacool.com TEST 8

## 1. distintive- distinctive

2. humileating- humiliating
3. Targetting- Targeting
4. distingiushes- distinguishes
5. agression- aggression
6. threaths- threats
7. couldn't
8. years,
9. Cyber
10. world.
11. socially - skilled,
12. bullies?
13. intent- intently
14. with- by
15. were- was
16. oldest- older
17. so- but
18. fury-furious
19.1) By not turning the lights off when not in use.
2) By utilizing old and inefficient appliances that consume large amounts of energy.
20. It is important to conserve energy to reduce the cost of producing it and to preserve our resources so that they last longer.
21. The main idea of the second paragraph is the disadvantages of utilizing fossil fuel generated energy on the environment.
22. Non-renewable resources mean that these resources are in limited supply and will eventually be exhausted.
23. 24) Use energy efficient light bulbs. 2) Take shorter showers or turn off taps when not in use.
3) Unplug appliances not in use. (Teacher's discretion)
24. Air pollution is caused when power plants that generate electricity emit harmful gases in the atmosphere. It causes serious health issues in human and animals and results in the death of millions of people.
25. The passage suggests that we can support companies using renewable energy and homeowners and businesses install their own solar or wind energy systems.
26. The old lady's dilemma is that there has been a lot of changes taking place in the world and she does not like what is happening. A line to support my answer is: What I find I don't like are the changes I'm seeing.
27. I think the old lady crashed her car into a telephone pole and was merely making an excuse.
28. The type of words confusing to the old lady are words used over the internet. These words are confusing because although they are words that the old lady is familiar with, they have a totally different meaning.
29. Word: Mouse /Old Lady's Meaning: A rodent/pest that invaded her home. /Meaning According to Poem: A small device that lets you control things on the computer.
Word: Website/ Old Lady's Meaning: A web that a spider created. /Meaning According to Poem: A website is a collection of web pages and related content.
30. A word from the passage similar in meaning to threatening is ominous.
31. The old lady requested that if anyone wanting to contact her or speak to her, he/she should do so in person and not online using technology (cellphone). I think she made that request because she is old and would prefer to speak to people in person since she may be lonely and would like companionship.
32. The mood of the poem is one of humour.
33. The poster shows all the things we can do to protect the earth on which we live.
34. Cycles do not need energy produced from fossil fuel to transport us from one place to another therefore it causes no air pollution.
35. Reuse means to use an item again in a different way whereas recycle means change the product into raw materials and use the raw material to make a new product.
36. Forest fires will affect wildlife because it will destroy their habitat.

## pennacool.com TEST 9

1. aniversary- anniversary
2. momentos- momentous
3. speshial- special
4. desegnated- designated
5. responsibilites- responsibilities
6. splendor- splendour
7. Yearly,
8. Jack
9. Nation!
10. Sir Ellis E.I. Clarke
11. activities:
12. fireworks.
13. cause- causes
14. much- many
15. exposed-
exposure
16. whom- who
17. has- have
18. and- however
19.The main reason for the climatic changes is the increase in greenhouse gases in the atmosphere.
19. Light from the sun passes through the atmosphere and is absorbed by the Earth's surface. Greenhouse gases, like carbon dioxide, act like a blanket, trapping heat near the surface and raising the temperatures thereby that warms the planet.
20. 21) Emissions from cars and factories. 2) Deforestation.
1. I think deforestation results in an increase in carbon dioxide in the atmosphere because trees use the carbon dioxide from the atmosphere to make food. When we cut down the trees there are fewer trees to use the carbon dioxide thereby causing the levels to increase.
2. Global warming results in rising temperatures which threaten human health, increase the risk of some types of extreme weather, and damage ecosystems.
3. Vulnerable means endangered or at risk.
4. Two things that can be done are to plant trees and use alternate sources of energy like wind and solar power.
5. The author feels frightened and concerned by the changes in our environment.
6. 7) Pollute the environment. 2) Burn fossil fuels.
1. The line means that humans, who have destroyed nature by their indiscriminate actions, will suffer the consequences of their actions. Their actions have resulted in global warming which will affect our lives adversely.
2. I think the poet is concerned for the children because their future on earth and the quality of their lives will be negatively affected because of global warming and climate change.
3. The lines 'War and terrorism as a threat to humanity seems little at all, When compared to climate change its impact seems small'.
4. Yes, I think it was necessary because our actions are causing serious destruction to our earth and we need to engage in practices to preserve our environment for present and future generations to enjoy a better quality of life.
5. The poet thinks that humans are irresponsible and stubborn. A line to support my answer is: Humans not known to learn from mistakes of the past.
6. The food pyramid provides dietary guidelines. It shows the different food groups and how much of each we need to have a healthy diet.
7. We should eat enough cereals, legumes, milk and milk products because they contain valuable nutrients needed to keep us strong and healthy.
8. 9) Smoking. 2) Drinking alcohol
1. 2) Easy to understand. 2) Pictures are colourful and attract the reader.

## pennacool.com TEST 10

1. desined- designed
2. effectivly- effectively
3. conceps- concepts
4. curicullum- curriculum
5. approch- approach
6. marketeable- marketable
7. Independence,
8. Nation
9. country's
10. Dr. Eric E. Williams
11. Republicanism,
12. Nation;
13. typicaltypically
14. occurs- occur
15. equatorequatorial
16. and- however
17. rapid- rapidly
18. removingremoval
19.1) Reduce. 2) Reuse. 3) Recycle.
19. Reducing means limiting the number of purchases you make whereas reusing means to take old item you would have thrown out and using them for something else.
20. Advantage- There is less packaging so resources will be saved and pollution reduced. Disadvantage- Items may expire if you are unable to use the large quantity in a timely manner.
21. I think the word is capitalized and highlighted to emphasize to the readers that reducing their consumption of electricity would lead to an additional reward; they will also be able to save money on their electricity bill, thereby encouraging them to reduce their electricity consumption.
22. 23) Reuse bottles to store water and other items or reuse as a vase.
2) Open your windows to ventilate and cool your home instead of using air conditioners.
24. The passage suggests you wait three days and if you are still thinking about the item, then you can purchase it.
25. The purpose of the last paragraph is to explain what is recycling and state the advantages of recycling.
26. The poet was rich and he became poor. The poet ended up in this condition because he had wasted his money. A line to support my answer is: I spent all my money away like it was water.
27. I think the poet was a wasteful, irresponsible individual. Instead of using his money wisely to lead a good life, he wasted it on unnecessary things leading him to a life of poverty.
28. No, I do not feel sorry for the poet because he is responsible for his situation and instead of him looking for
ways to improve himself, he uses whatever little money he gets from begging to purchase alcohol.
29. No, I do not think the poet had genuine friends because after he lost his money, they deserted him when they should have helped him to stand on his feet again.
30. The word 'spendthrift' best describes the poet.
31. On the streets, the homeless have to sleep on the pavements, they have no food to eat and showers to bathe whereas the shelter provides food for the homeless and they are able to take a shower and sleep in a warm bed.
32. I would advise the poet to try to improve his life by getting a job and to be careful of the types of friends he has in the future.
33. 34) Domestic Sewage. 2) Industrial Sewage. 3) Agricultural Sewage.
1. Fertilizers and pesticides used by farmers on agricultural land can seep into ground water or be washed away by rain into rivers, streams and other water courses thereby polluting them.
2. 3) Oil Spills. 2) Disposal of garbage, namely plastics. 3) Disposal of waste from ships etc.
1. To bring awareness about the effects of water pollution on all living things so that humans could be more sensitive and engage in activities that prevent/reduce pollution.
