8. Kelly has 45 marbles, 21 of them are blue and the remaining marbles are
   equal numbers of red and yellow.

   a) What is the ratio of blue marbles to yellow marbles?   *21:12*

   b) What is the ratio of red marbles to the total?   *12:45*

   c) What is the ratio of red marbles to yellow marbles?   *12:12*

9. The following recipe is for 2 dozen cookies.

3 cups of flour
$\frac{1}{2}$ teaspoon salt
1 teaspoon baking soda
1 teaspoon cinnamon
200g unsalted butter
$\frac{1}{4}$ cup brown sugar
1 egg

   a) How many cups of flour will be
      needed to make 36 cookies?
      4:5

   b) How many eggs will be needed to
      make 12 cookies?
      1/2
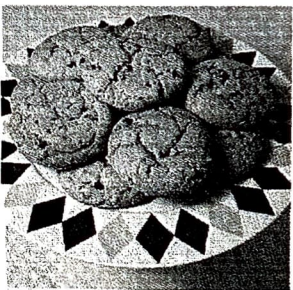
   c) How much baking soda will be needed to make half a dozen cookies?
      1/4 a teaspoon

   d) If I poured 6 cups of flour and 2 eggs into a bowl to make some cookies,
      how much unsalted butter would also be needed?   *400 g*

   e) How much of each ingredient is needed to make 8 dozen cookies?

12	flour	*2*	salt
47	baking soda	*4*	cinnamon
8	unsalted butter	*1*	brown sugar
8	eggs		

10. Joyce has 36 lollies and shared them with Lisa in the ratio of
   4:5. Lisa got a larger share. How many lollies should Lisa get?
    20

Speed & Accuracy on Total and Average

Time: 3 min, 37 sec, 15 milli sec

The average is calculated by adding up the figures given and then dividing by the total number of figures.

Complete the table.
Find the total and the average.

	Set of Numbers	Total	Average
1.	2, 8	$2 + 8 = 10$	$10 \div 2 = 5$
2.	2, 8, 14	$2 + 8 + 14 = 24$	$24 \div 3 = 8$
3.	5, 7, 12	$5 + 7 + 12 = 24$	$24 \div 3 = 8$
4.	6, 11, 13	$6 + 11 + 13 = 30$	$30 \div 3 = 10$
5.	21, 30, 30	$21 + 30 + 30 = 81$	$81 \div 3 = 27$
6.	0, 45, 90	$0 + 45 + 90 = 135$	$135 \div 3 = 45$
7.	45, 62, 82	$45 + 62 + 82 =$	$189 \div 3 = 63$
8.	102, 128, 130	$102 + 128 + 130 = 360$	$360 \div 3 = 120$
9.	8, 29, 35, 40	$8 + 29 + 35 + 40 = 112$	$112 \div 4 = 28$
10.	92, 80, 38, 70	$92 + 80 + 30 + 70 = 272$	$272 \div 4 = 68$
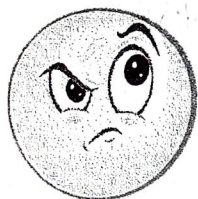
My Score: /18

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# Speed and Accuracy on Time Units Conversion

Time: __2__ minutes __5__ seconds

My Score: ___ /30

1. 2 days = __48__ hours
2. 3 minutes = __180__ seconds
3. 84 hours = __4__ days
4. 28 days = __4__ weeks
5. 120 seconds = __2__ minutes
6. 42 days = __3__ fortnights
7. half a day = __12__ hours
8. 4 hours = __240__ minutes
9. 2 fortnights = __28__ days
10. 210 minutes = __3.5__ hours
11. a leap year = __366__ days
12. 30 minutes = __½__ hour
13. 15 mins + 45 mins = __1__ hr
14. 36 hours = __1.5__ days
15. 3 weeks = __21__ days
16. 15 weeks x 3 = __45__ weeks

17. 20 x 5 seconds = __100__ seconds
18. 55 mins ÷ 11 = __5__ mins
19. half of 120 mins = __1__ hour
20. ¼ of 8 days = __2__ days
21. 2 weeks – 2 days = __12__ days
22. 46 hours + 120 mins = __2__ days
23. 2 fortnights + 6 days = __34__ days
24. 120 days – 29 days = __91__ days
25. 42 days ÷ 6 = __1__ week
26. 1 year = __52__ weeks
27. $\frac{1}{3}$ of 1 hour = __20__ minutes
28. ¼ of 80 mins = __20__ mins
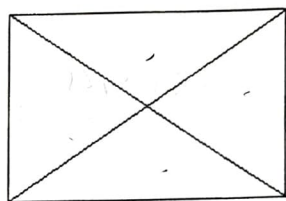29. a decade = __10__ years
30. a century = __100__ years

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Counting Shapes

1. How many triangles are there in the shape below? ___7___

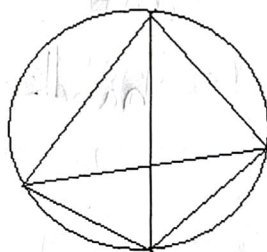**3.** How many triangles are there in the shape below? ___6___
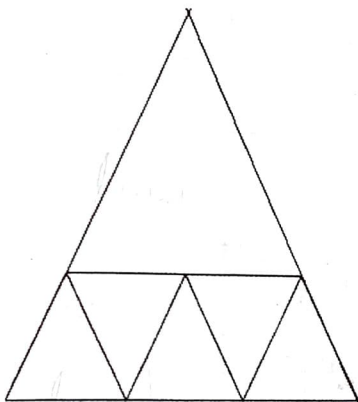
2. How many rectangles are there in the shape below? ___7___
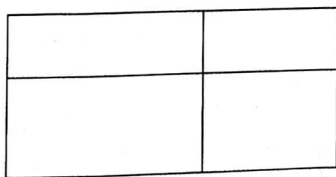
4. How many triangles are there in the shape below? ___4___

5. How many triangles are there in the shape below? ___8___

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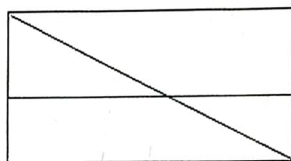
Complete this table. The first entry has been done for you.

Animal	Home	Air/Land/Water
otter	holt/lodge	land and water
Spider	web	land and water
beaver	lodge	land
hare	form	Land
fox	den/lair	land
horse	stable	land
bat	cave	air/land
ant	hill	land
hawk	eyrie	air
mole	burrow	land

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ANIMAL HOMES

Complete the following analogies.

1. Cattle is to barn as _____dog/cat_____ is to kennel.

2. Lion is to __pride__ as __pig__ is to sty.

3. __horse__ is to stable as __bat__ is to cave.

4. Snake is to __hole__ as mole is to __burrow__.

5. Eyrie is to __hawk__ as coop is to __chicken__.

6. Badger is to __burrow/sett__ as __squirrel__ is to drey.

7. __Stock__ is to sheep as sett is to __badger__.

8. __ant__ is to hill as bear is to __lair__.

9. Cat is to __kennel__ as __hare__ is to form.

10. __mole__ is to fortress as __otter__ is to holt.

Draw what lives in a **sty.**

Draw where a **spider** lives.
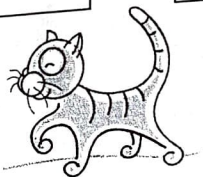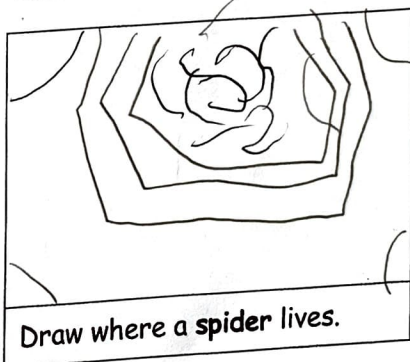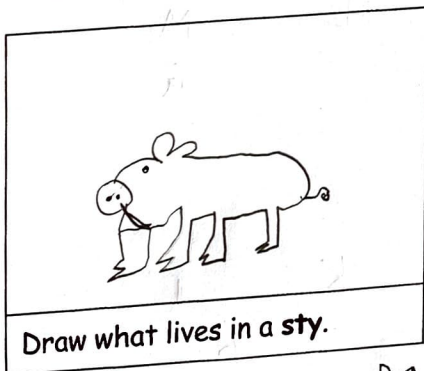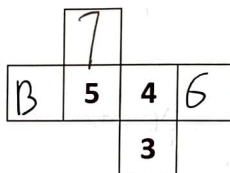
Spatial Reasoning: Dice Nets

In the following questions, use the information on the left to fill in the gaps on the nets of the dice.

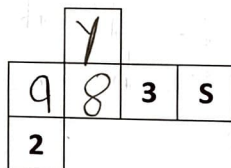**1)** The 3 is opposite of the 7.

The 5 is opposite of the 6.

The 4 is opposite of the B.

	7		
B	5	4	6
		3	

2) The Y is opposite of the 2.

The 8 is opposite of the S.

The 3 is opposite of the 9.

	Y		
9	8	3	S
2			

3) The A is opposite of the E.

The 7 is opposite of the M.

The 0 is opposite of the G.

			0
E	7	A	M
			G
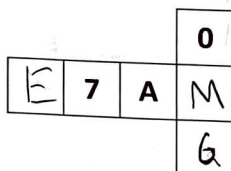
4) The R is opposite of the 6.

The 5 is opposite of the 1.

The K is opposite of the 3.

R			
K	5	3	1
	6		