



# Answer Sheet: Key Stage 2: Year 5: Arithmetic Test 1



Guidance: Children will have 30 minutes for this test.

question	answer	marks
1	557	1
2	84	1
3	22	1
4	<u>6</u> 7	1
5	$\frac{4}{8}$ or $\frac{1}{2}$	1
6	7825	1
7	5807	1
8	42	1
9	105	1
10	3696	1
11	4.3	1
12	4.5	1
13	5	1
14	87 953	1
15	49 400	1
16	743 183	1
17	49	1
18	420	1
19	80	1
20	1200	1
21	7 8	1

question	answer	marks
22	$\frac{5}{10}$ or $\frac{1}{2}$	1
23	3	1
24	7.17	1
25	10 920	2
26	149 110	2
27	66	2
28	1247	2
		Total 32

# Measurement

# Estimate, Measure, Compare, Add and Subtract

47.

# Lengths (mm/cm/m)

Measure and draw lines using a ruler in centimetres (cm) or millimetres (mm).

This line is \_\_\_\_\_mm long.

# Mass (g/kg)

Measure the mass of objects using different scales

48. 3 apples weigh 435g. One is eaten, and the 2 remaining apples weigh 285g. What is the mass of the eaten apple?

# Capacity (ml/l)

49.

Circle the jug which has more water:



75ml



#### 90ml

## Convert between units

50.

Complete the missing conversions:

#### Length:

#### Mass:

#### Time:

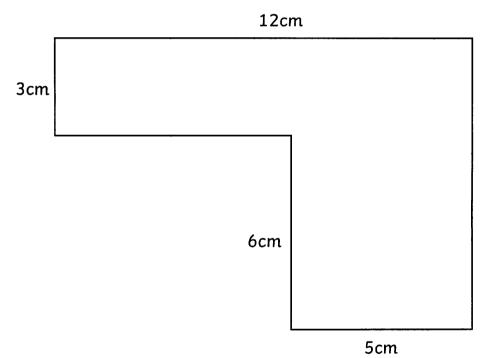
### Perimeter

51. Calculate the perimeter:

8cm	_
	3cm

Perimeter = \_\_\_\_cm.

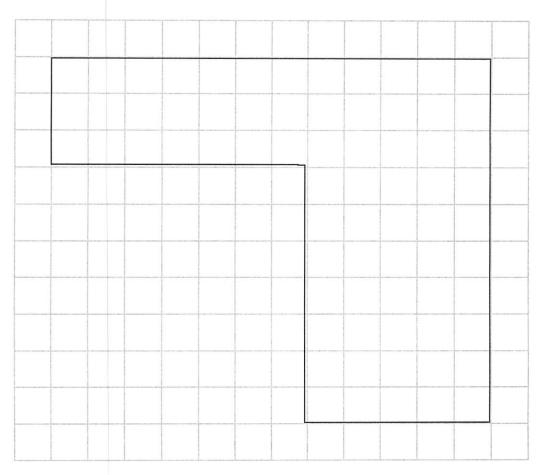
Measure and calculate the perimeter of rectilinear shapes (including squares)



Perimeter = \_\_\_\_\_cm.

#### Area

52. a) Calculate the area of this rectilinear shape by counting squares:



Area = \_\_\_\_\_cm<sup>2</sup>

b) Measure the sides of the rectangle and calculate the area:

Г	
1	
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- 1	
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١	
- 1	

Areα = \_\_\_\_cm × \_\_\_\_cm = \_\_\_\_cm²

c) Estimate the area of this irregular shape:



## Money

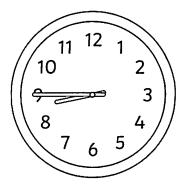
53. Add and subtract giving change

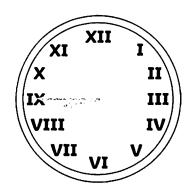
Jude buys a bag of apples for £2.25 and some avocados for £3.15. How much change will he get from £20?

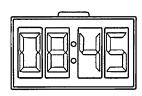
#### Time

54. Analogue clocks and 12/24 hour time

a) What time do these clocks show? \_\_\_\_\_







b) The maths lesson lasted 1 hour and 5 minutes. The art lesson was one hour and twenty minutes. Which lesson was longer and by how long?

c) A film lasts 136 minutes. How long is the film in hours and minutes?

hours	and	minutes
 noui 3	with	 111111111111111111111111111111111111111

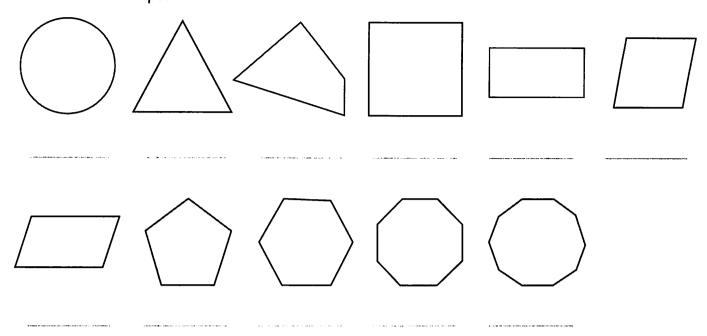
## Solve Problems

55. a) 2 equal bottles of water contain 500ml of drink. How many litres will 7 bottles hold?

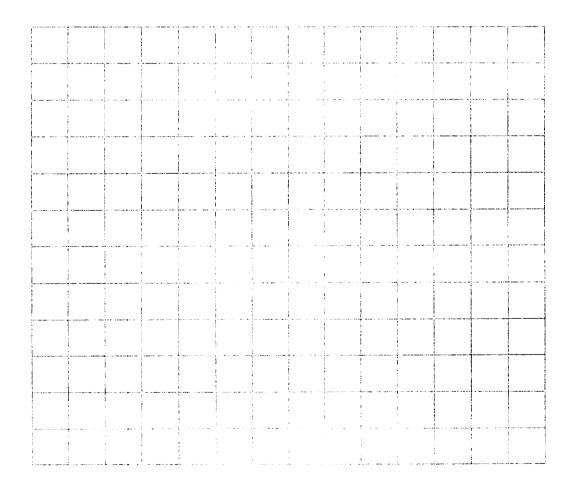
b) A 6.5kg bag of soil is divided into 20 pots equally. Each pot needs 0.5kg. How much more soil does each pot need after the bag is used up?

# 2D Shapes

56. Label the shapes.

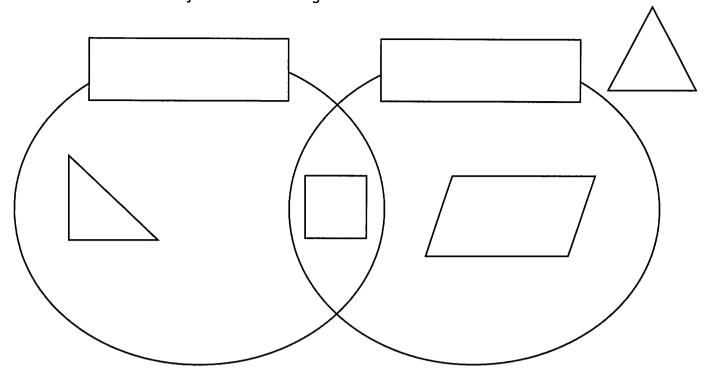


57. Draw a square on 1cm squared paper with sides of 4cm.

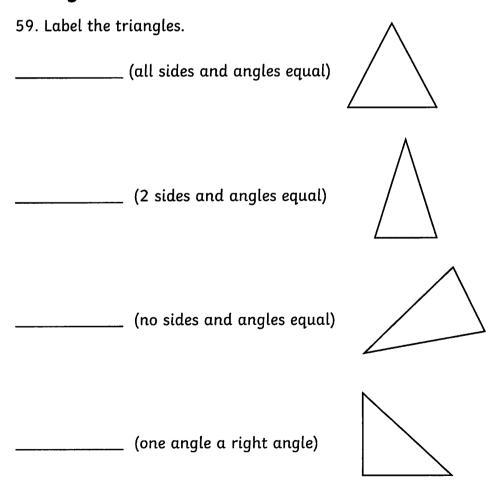




58. Write suitable titles for this Venn diagram:



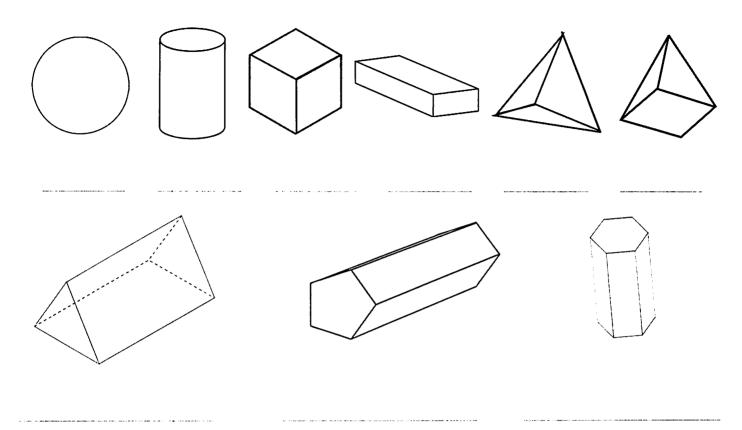
# Triangles



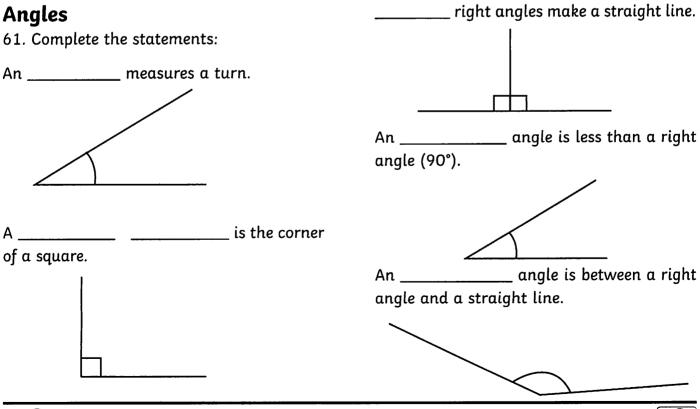


# **3D Shapes**

#### 60. Label the shapes:



Recognise 2D representations and make models from modelling materials



# Multiplication and Division

# **Multiplication Tables**

17. Fill in the missing numbers:

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1		3		5	6		8		10	11	
2		4		8	10		14		18			24
3	3		9							30		36
4					20						44	
5						30					55	
6	6					36		48	,	60		72
7	7		21		35		49		63		77	
8				32			56		72		88	96
9	9	18			45			72		90		108
10	10		30			60						120
11			33		55						121	
12	12		36			72						144

# Multiplying and Dividing

18. Use knowledge of place value and related facts to solve these calculations:

400 × 5 = \_\_\_\_\_\_ 630 ÷ 7 = \_\_\_\_\_

Multiply by O and 1 and divide by 1:

Multiplying and dividing whole numbers and decimals by 10, 100 and 1000:

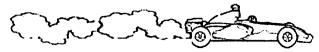




# Ultimate Times Table Challenge

Name: Number Correct:

Time: Previous Score:



	<b></b>				
1 × 1 =	11 × 12 =	10 × 12 =	3 × 5 =	1 × 9 =	7 × 1 =
1 × 5 =	1 × 2 =	2 × 5 =	4 × 1 =	2 × 9 =	4 × 5 =
3 × 1 =	3 × 3 =	9 × 12 =	3 × 7 =	6 × 1 =	3 × 11 =
1 × 4 =	4 × 3 =	1 × 3 =	11 × 7 =	4 × 9 =	3 × 9 =
5 × 1 =	8 × 9 =	5 × 5 =	8 × 12 =	2 × 7 =	5 × 11 =
10 × 3 =	6 × 3 =	1 × 11 =	2 × 11 =	11 × 11 =	1 × 7 =
5 × 3 =	9 × 7 =	7 × 5 =	7 × 7 =	7 × 9 =	10 × 5 =
8 × 1 =	10 × 1 =	5 × 7 =	6 × 5 =	3 × 8 =	8 × 11 =
9 × 1 =	9 × 3 =	3 × 10 =	9 × 9 =	4 × 7 =	8 × 7 =
11 × 9 =	6 × 8 =	6 × 11 =	10 × 7 =	10 × 9 =	10 × 11 =
11 × 1 =	11 × 3 =	11 × 5 =	2 × 3 =	4 × 11 =	8 × 5 =
12 × 5 =	12 × 12 =	5 × 4 =	12 × 7 =	12 × 9 =	12 × 11 =
2 × 1 =	8 × 3 =	6 × 7 =	1 × 12 =	1 × 10 =	7 × 3 =
2 × 2 =	9 × 11 =	2 × 6 =	2 × 8 =	2 × 12 =	7 × 6 =
11 × 4 =	3 × 4 =	5 × 9 =	12 × 2 =	2 × 4 =	1 × 6 =
4 × 2 =	4 × 4 =	4 × 6 =	6 × 9 =	4 × 10 =	9 × 5 =
5 × 2 =	10 × 2 =	12 × 1 =	5 × 8 =	3 × 6 =	7 × 11 =
7 × 4 =	6 × 4 =	6 × 6 =	12 × 3 =	6 × 2 =	8 × 4 =
7 × 2 =	9 × 2 =	2 × 10 =	5 × 10 =	1 × 8 =	5 × 6 =
7 × 8 =	6 × 10 =	12 × 10 =	12 × 4 =	8 × 10 =	8 × 2 =
10 × 4 =	9 × 4 =	3 × 12 =	9 × 8 =	12 × 8 =	8 × 6 =
11 × 6 =	9 × 6 =	10 × 6 =	3 × 2 =	4 × 12 =	9 × 10 =
11 × 2 =	6 × 12 =	5 × 12 =	11 × 8 =	11 × 10 =	8 × 8 =
7 × 12 =	10 × 10 =	12 × 6 =	7 × 10 =	4 × 8 =	10 × 8 =



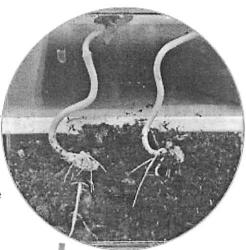
# Making a mini greenhouse

It's fun to plant seeds in a pot or a flowerbed and wait for the stems and leaves to appear, but do you know what's really going on under the soil? By planting your seeds in a CD case you'll be able to see how seeds sprout and grow because the case is so thin that the roots won't be hidden under a lot of soil.



#### What you'll need

- · A clear plastic CD case
- · Some soil
- Tape
- Some seeds (beans work well)
- A dropper for watering
- Water





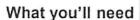
#### What to do

- You can grow 2 small or 1 large bean seed in each CD case. Soak the seeds overnight to help them sprout quickly.
- 2. Take the inner plastic holder out of the case you don't need it.
- 3. Mix some soil with a little water until it is damp, but not soaking wet.
- 4. Put a little of the soil in the CD case at the end opposite the hinge so that it is about one-third full. The hinge will be at the top of your mini greenhouse. Place the seed(s) about halfway down the soil.
- 5. Close the CD case and tape up the sides but not the hinged end.
- 6. Place your mini greenhouse on a sunny windowsill and water the soil a little bit every day or so using the dropper through the gap at the hinge.
- Watch your seedlings grow. When they get too big for the greenhouse you can move them to a small flowerpot.

# Colour your own flowers

Change white flowers into coloured ones without using paint or a brush and learn some science along the way. Which colours are you going to try?





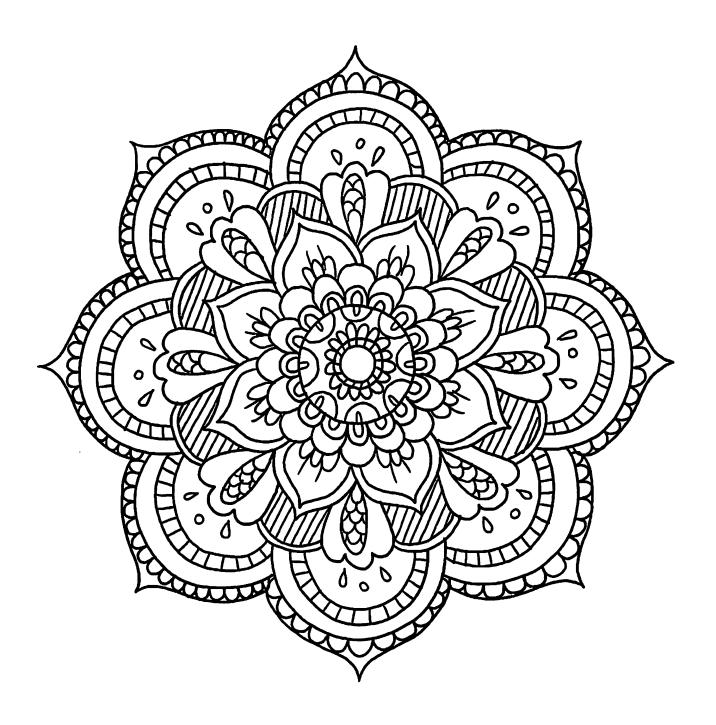
- Fresh white flowers (carnations work well, as do daisies, tulips and roses)
- A container for each colour, preferably a glass jar or similar
- Different food colours (100% natural)
- Water

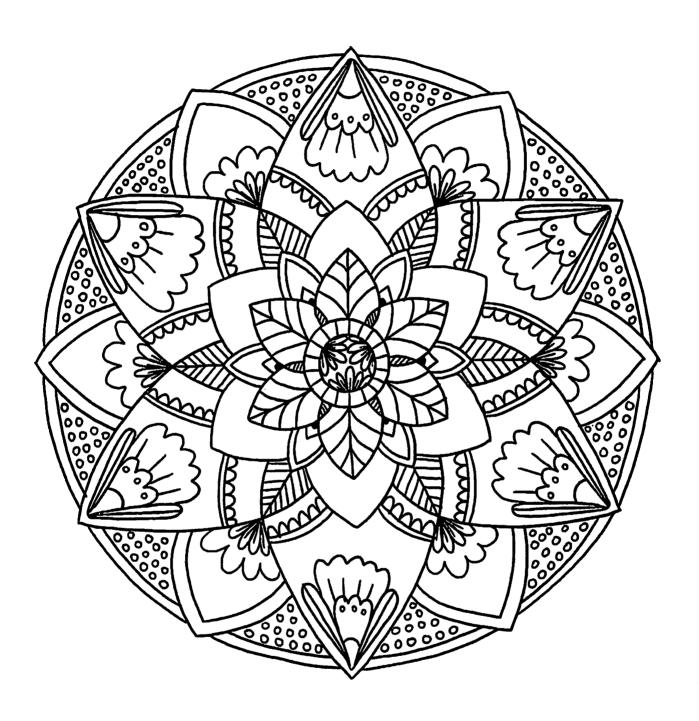
Like us, plants need water to survive. They draw it through their systems in a very clever way. What happens is that water evaporates from their leaves and petals in a process called transpiration. As this happens, more water is pulled up the plant through a system of tiny tubes in the stem - a bit like when you suck a drink up through a straw.

Usually you can't see this happening, but if you put food colouring in the water, the coloured water will go right up into the leaves and flowers, changing their colour – just like magic!

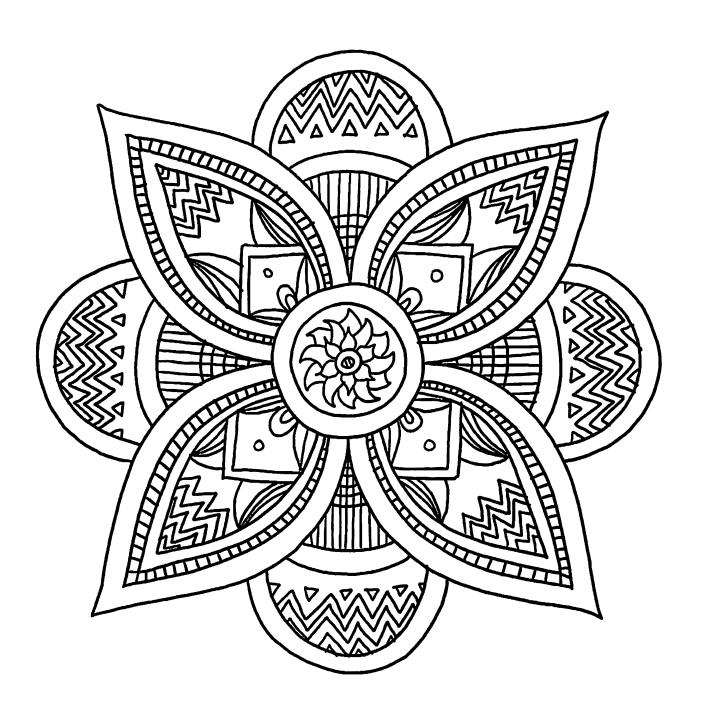
#### What to do

- Fill each container around half full of water and add a food colouring until you
  get a strong colour about ten drops to half a cup of water. Each container
  should have a different colour but you can mix colours to make new ones
- Cut off the bottom of each flower stalk to leave around 15–20cm.
- Put a flower in each of your containers and put it in a safe, sheltered place
- What do you think will happen to the flowers? How long will it take? (Scientists call this a hypothesis.)
- 5. Check on your flowers after an hour or so. Do they look the same or different?
- Leave the flowers overnight and check again. Have they changed? Leave them for longer and see what happens.



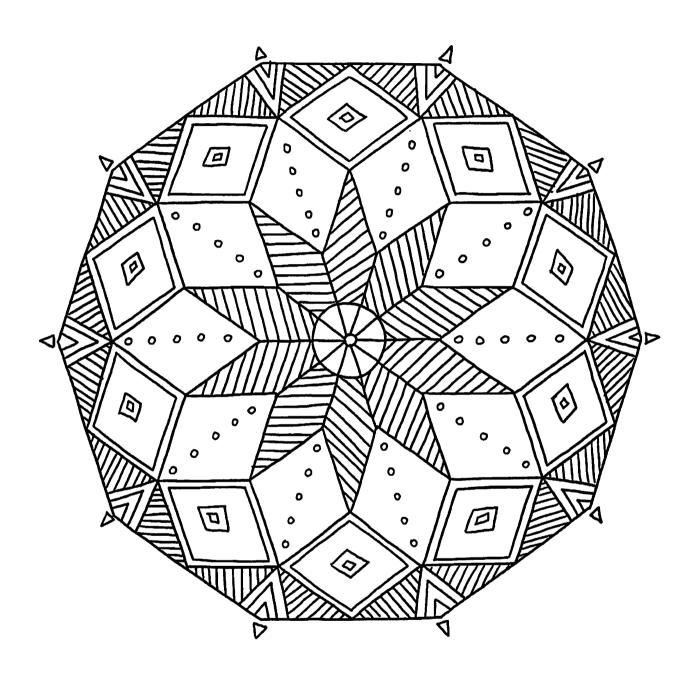












# Wellbeing Craft - Things to Look Forward To Jar

Use these craft instructions to create your own wellbeing jar. Having things to look forward to can make you feel happier and improve your wellbeing. Each time you think of something you would like to do in the future, write it on a piece of paper and place it inside your decorated jar.

#### You will need:

- · glass or plastic jar
- sticky label or strip of paper
- · scissors
- · tissue paper or colored paper
- paintbrush
- · pencil
- · white glue
- paper to record the things you are looking forward to

# Things to Look Forward To

#### Instructions



Cut shapes out of the colorful paper or tissue paper.



Write a label for your jar.
You could write "Things to
Look Forward To."



Use the paintbrush to put some glue onto the jar.



You can use white glue to paint over the top of the shapes on your jar and the label. This will give it a nice, shiny effect.



Stick the paper shapes carefully onto the jar.



Once dry, your jar is ready to use. Write things that you are looking forward to on pieces of paper and place them into your decorated jar.