

Today's Maths Challenge - A range of questions about the properties of Shapes. Some of the questions are multiple choice - be sure to check all the possible answers. Don't forget - you can email for help and support at yearsix@blowers.dudley.sch.uk

For some of the questions you may need to draw yourself a diagram to support your thinking.

1. Estimate the size of angle $w$. Circle the correct answer.
A $35^{\circ}$
B $60^{\circ}$
C $20^{\circ}$
D $120^{\circ}$
E $90^{\circ}$

2. Angles $R$ and $S$ lie on a straight line.

If angle $R$ is $49^{\circ}$, what is angle $S$ ?

3. Look at the diagram below. What is the size of angle $x$ ?

4. Angles $g, h, j$ and $k$ lie around a point. Angles $g, h$ and $j$ are obtuse.

Which of the following could be the size of angle $k$ ? Circle the correct answer.
A $215^{\circ}$
B $90^{\circ}$
C $150^{\circ}$
D $73^{\circ}$
E $98^{\circ}$
5. Look at the diagram below. What is the size of angle $y$ ?

6. What is the name of the shape shown to the right? Circle the correct answer.
A Rhombus
B Octagon
C Hexagon
D Heptagon
E Pentagon

7. Niamh has five identical straight sticks. She uses all of the sticks to make different shapes by laying them end to end. Which of the following shapes could she not have made? Circle the correct answer.
A Isosceles triangle
B Trapezium
C Regular pentagon
D Rectangle
** For question 7 you may wish to get some practical equipment to help you eg matchsticks(be careful!) / lollipop sticks / straws / pencils etc. They just need to be the same length. Can you make the shapes suggested - you can put two or more together to make a longer side. Remember you only have 5. Eg. you could make an isosceles triangle like this!

8. Robbie is making a circular watch face. He paints the outside edge of the watch face silver. What part of the circle does he paint silver? Circle the correct answer.

A Radius
B Circumference
C Diagonal
D Vertex
E Diameter
9. How many pairs of equal angles does a kite have?
10. A circular dinner plate has a diameter of 240 mm . What is the radius of the plate?

11. Jenny has drawn the isosceles triangle to the right. What is the size of angle $m$ ?

12. Bassam used four different equilateral triangles to make the pattern shown below.

What is the size of angle $b$ ?

13. Linh has been asked to draw an irregular quadrilateral.

Which of the following shapes should she not draw? Circle the correct answer.
A Rhombus
B Kite
C Square
D Rectangle
E Parallelogram
14. A regular heptagon has a perimeter of 84 cm .

What is the length of each side?

15. George is painting the lines on the outside of the rugby pitch shown below.

One can of paint covers 100 m . How many cans of paint will he need?


As we are coming to the end of year 6 (what a rather strange year it has been!) I would like us to think reflectively. I want you to think back over your time at Blowers Green and pick out events or memories that you could write about and share with others. It could be a funny moment. It could be a memorable trip. Something exciting that happened in school. I want you to write a short account of the event, who was there? When did it happen? Why is it so memorable? Try and add detail to you recount. Try and imagine you are writing a story. You may wish to write about more than one event. If you want to share any of these stories then don't forget to email them to me.


Task 3 - Art - Folding surprise drawings.
A fun activity this afternoon! I want you to have a try at making one of these folding surprise drawings. A drawing that looks like one thing and then folds out to be something else!
https://www.youtube.com/watch?v=RYOfIi5eQ8g\&list=PLnoO3k54vcBSa78fuytaxOhGgVRZOBsp\&index=7\& $t=0$ s


After you have had a go at the example in the link provided you can be creative and come up with your own versions and examples! There are also other videos to link to on the Arthub.

Have fun and stay safe
Mr Thompson ©

