

Friday 10<sup>th</sup> July 2020

HAAAPPPYYYYY FFFRRRIIIDDAAAYYYY!!!! Hello everyone - let's start Friday with a joke!



Here are yesterday's maths answers - how did you do?

1 **B** — Angle  $w$  is smaller than a right angle but larger than half of a right angle ( $90^\circ \div 2 = 45^\circ$ ), so it must be  $60^\circ$  — option B.

2 **131°** — Angles on a straight line add up to  $180^\circ$ , so  $S = 180^\circ - 49^\circ = 131^\circ$ .

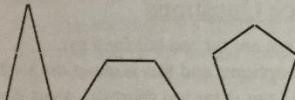
3 **302°** — Angles in a triangle add up to  $180^\circ$ , so the missing angle in this triangle is  $180^\circ - 38^\circ - 84^\circ = 58^\circ$ . This angle is around a point with angle  $x$ , so these two angles must add up to  $360^\circ$ . So angle  $x$  is  $360^\circ - 58^\circ = 302^\circ$ .

4 **D** — Obtuse angles measure more than  $90^\circ$  but less than  $180^\circ$ , so three obtuse angles together must measure more than  $90^\circ \times 3 = 270^\circ$ . Angles around a point add up to  $360^\circ$ , so angle  $k$  must measure less than  $360^\circ - 270^\circ = 90^\circ$ . The only option less than  $90^\circ$  is D —  $73^\circ$ .

5 **44°** — First, look at the quadrilateral made up of the outside edges of the diagram. The angles in a quadrilateral add up to  $360^\circ$ , so the top angle must be  $360^\circ - 68^\circ - 122^\circ - 51^\circ = 119^\circ$ . This angle is made up of angle  $y$  and a  $75^\circ$  angle, so angle  $y$  is  $119^\circ - 75^\circ = 44^\circ$ .

6 **C** — The shape has six sides, so it is a hexagon.

7 **D** — She would need at least six sticks to make a rectangle, since the smallest rectangle would have two sides made up of one stick each and two sides made up of two sticks each —  $1 + 1 + 2 + 2 = 6$ . The diagram below shows how she could make the other shapes.



8 **B** — The outside edge of a circle is called the circumference.

9 **1** — A kite has 2 pairs of equal sides and 2 equal angles, so it has 1 pair of equal angles.

10 **120 mm** — The diameter is twice the radius, so the radius is  $240 \div 2 = 120$  mm.

11 **76°** — The angles in a triangle add up to  $180^\circ$ , so the two missing angles must add up to  $180^\circ - 28^\circ = 152^\circ$ . The triangle is isosceles, so these two angles are equal. So each of them is  $152^\circ \div 2 = 76^\circ$ .

12 **120°** — Angle  $b$  is around a point with four angles in equilateral triangles. Each angle in an equilateral triangle is  $60^\circ$ , so these four angles add up to  $60^\circ \times 4 = 240^\circ$ . Angles around a point add up to  $360^\circ$ , so angle  $b$  is  $360^\circ - 240^\circ = 120^\circ$ .

13 **C** — A square has four equal sides and four equal angles, so it is a regular quadrilateral. All of the other options have at least one side or angle that is different in size, so they are irregular quadrilaterals.

14 **12 cm** — A regular heptagon has seven equal sides, so each side is  $84 \div 7 = 12$  cm long.

15 **4** — First, find the perimeter of the pitch.  $70 + 130 + 70 + 130 = 400$  m, so he needs to paint 400 m of lines. So he needs  $400 \div 100 = 4$  cans.

16 21

Today's Maths - Arithmetic Friday!

Let's get going on another set of Arithmetic questions!

1.  $12 \times \underline{\hspace{2cm}} = 600$
2.  $25.5 \times 10 = \underline{\hspace{2cm}}$
3. Calculate:  $100 - (3 \times 10 \times 2) = \underline{\hspace{2cm}}$
- 4 Change 55 % into a fraction: = .....
5. What is the change from £20 after buying 5 books at £1.42 each?
6. Circle the two prime numbers: 21 8 17 19
7. Round 78,945 to the nearest 10 thousand .
8. Round 6.811 kg to nearest whole kg.           kg
9.  $246 \div 6 = \underline{\hspace{2cm}}$  10. 6300 divided by 9 =

11. Two angles of a triangle are  $65^\circ$  and  $40^\circ$ .  
What is the size of the third angle? \_\_\_\_\_ degrees
12. Find the change from £5 after buying  
0.7kg of apples at 18p per 100g. £\_\_\_\_\_
13.  $56 \times 72$
14. If  $6a - 2 = 16$ , what is the value of  $a$ ? \_\_\_\_\_
15. If the time is 10.32 pm. How many minutes until it is 11.05 pm? \_\_\_\_\_ min.
16.  $3 \times 40 \times 10 =$  \_\_\_\_\_ 17.  $2435 - 798 =$  \_\_\_\_\_
18. The three angles of a quadrilateral are  $100^\circ$ ,  $140^\circ$ ,  $60^\circ$ .  
What is the size of the other angle?
19. if  $n = 12 =$  What is  $6n + 5$ ?
20. Mr Thompson thinks of a number, he squares it then adds 6. His answer was 70. What number did he start with?
21.  $579 \times 67 =$
22. A regular hexagon has a side that measures 7.5cm - what is the perimeter of the shape?
23.  $6 - 1.678 =$
24.  $0.7 + 0.06 + 0.67 =$
25. What is  $\frac{2}{3}$  of 512?
26.  $16,283 \div 19 =$
27.  $0.19 \times 1000 =$
28. Write 9% as a decimal
29. find  $\frac{1}{5}$  of 30,000
30. Add  $\frac{7}{8}$  and  $\frac{1}{3} =$

## English Task - Similes and Metaphors

# The Difference Between Similes and Metaphors

## Simile

A comparison of two things by using the words  
"like" or "as."



Example:

As tall as a giraffe.

## Metaphor

A comparison in which one thing  
is said to be another.

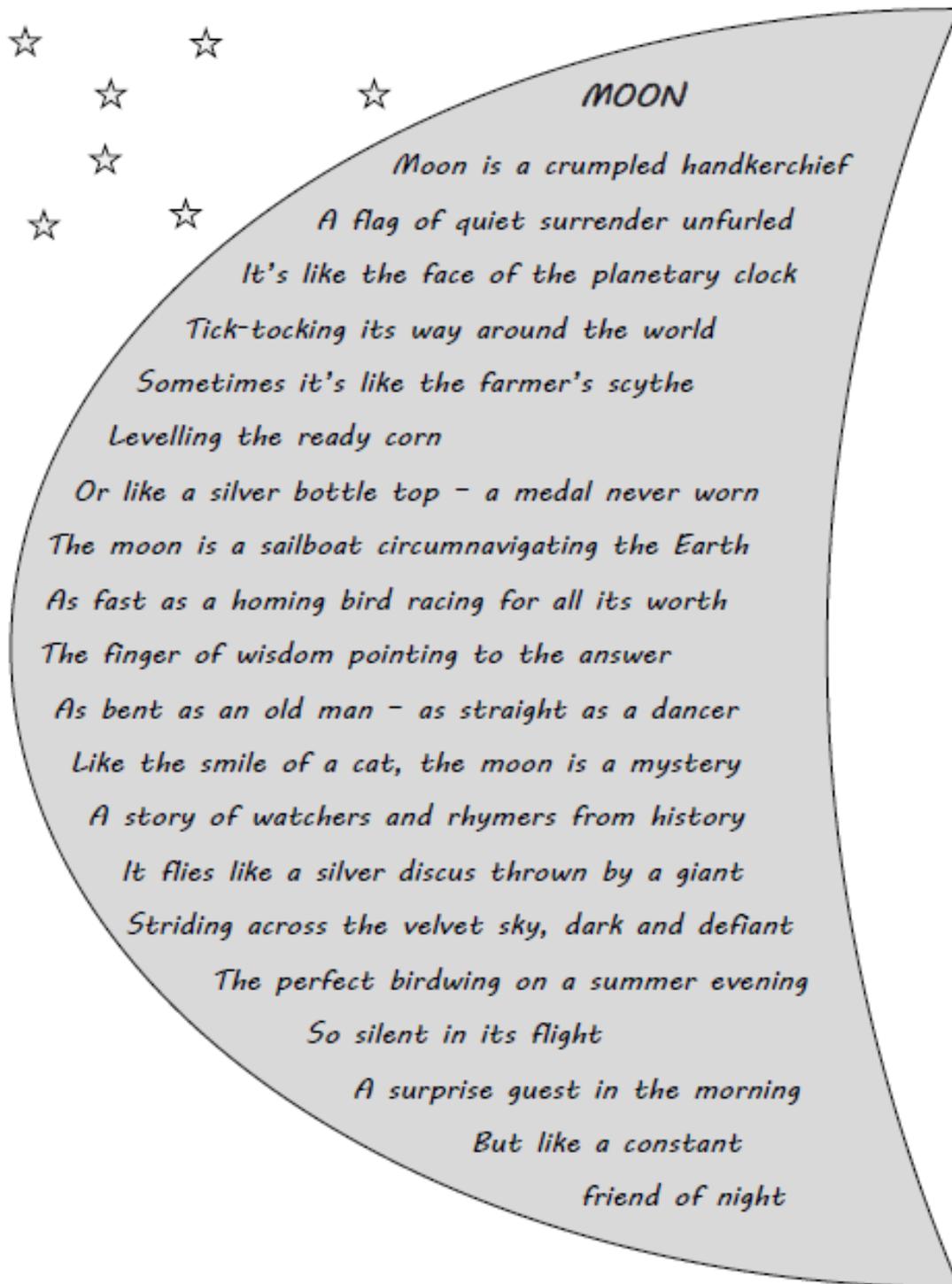


Example:



My mom is a teddy bear.

Here is a poem about the moon comparing it to different things, using a mixture of metaphors and similes. After you've read it, decide whether the things it's compared to are metaphors or similes. Then tick the correct boxes.



On the next page identify the language features in the poem deciding whether they are similes or metaphors. You may need to read the phrase or word in context to help you understand. Draw the table in your book.

Now decide whether the words and phrases in the table are part of a metaphor or a simile and put a tick in the correct box. Do you remember the difference between a simile and metaphor?

word or phrase	metaphor	simile
crumpled handkerchief		
flag of quiet surrender		
face of the planetary clock		
farmer's scythe		
silver bottle top		
medal		
sailboat		
homing bird		
finger of wisdom		
old man		
dancer		
smile of a cat		
mystery		
story of watchers and rhymers		
silver discus		
perfect birdwing		
surprise guest		
constant companion		

### Task 3 - Topic - DT - Construction.

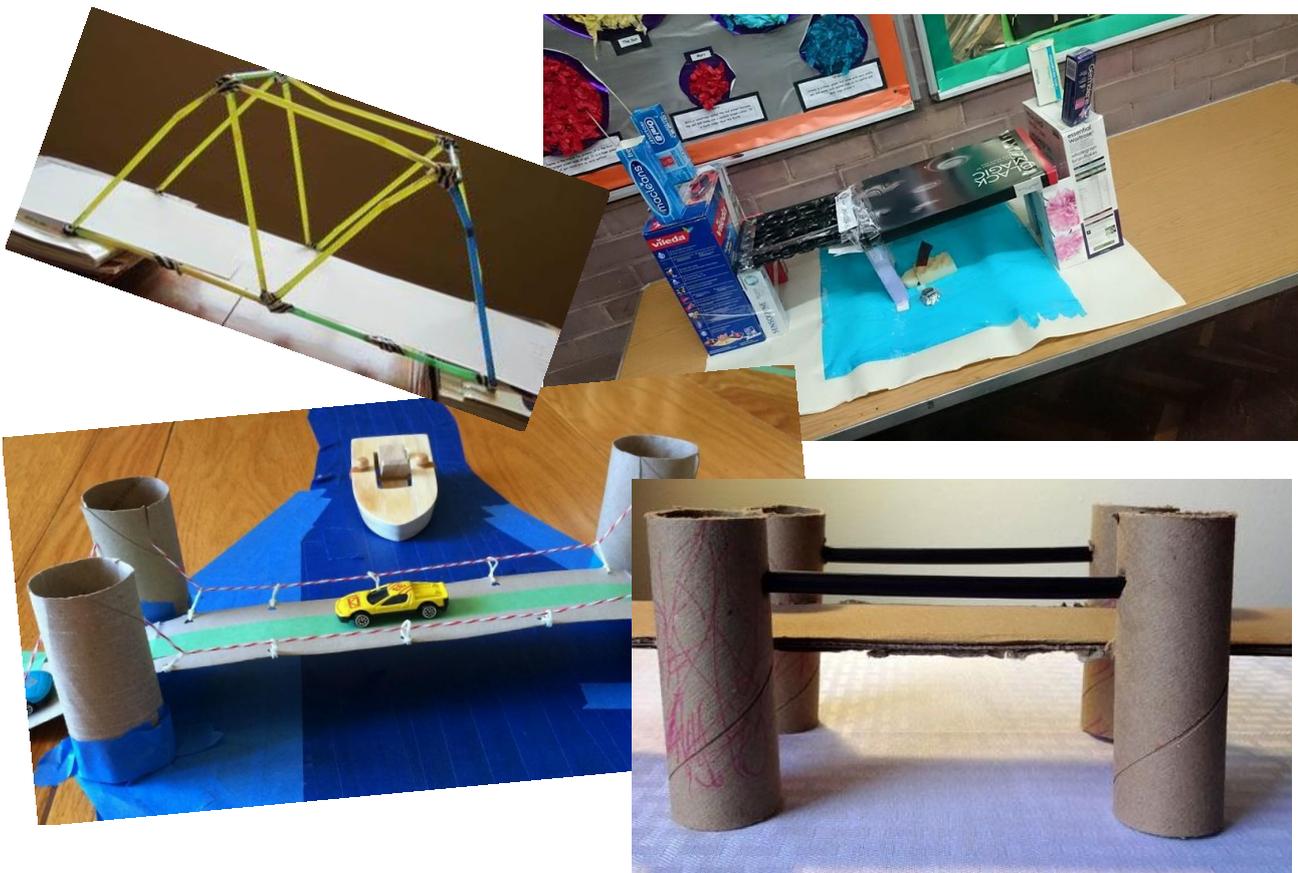
STEM Challenge Cards

Design and make a bridge spanning a gap of 30cm which can hold as much weight as possible.

Competition – Which bridge can hold the most weight before it fails? (Use actual weights, books, blocks etc.)



Have a go at the challenge above. I want you to build a bridge from junk! Use cardboard boxes / things in you recycling bags and build a bridge that spans 30 cm and can hold some weight without collapsing. You may want to use glue / sticky tape / masking tape / string / newspaper / lollipop sticks etc. to help with your construction.



Email me your results. [yearsix@blowers.dudley.sch.uk](mailto:yearsix@blowers.dudley.sch.uk)

Have fun, enjoy your weekend - Mr Thompson