| Year 2 maths - week beginning: 27.4.20 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Theme | 3D Shape lesson 1 Recognising 3D shapes | 3D Shape lesson 2 Describing 3D shapes | 3D Shape lesson 3 Grouping 3D shapes | 3D Shape lesson 4 Making patterns with 3D shapes | 3D Shape lesson 5 3D shapes quiz |
| Factual fluency (to aid fluency) | Identify and match circles, rectangles, squares and triangles https://www.topmarks.co.uk/early -years/shape-monsters | Complete this 2D shapes quiz: https://www.educationquizzes.co $\mathrm{m} / \mathrm{ks}$ //maths/year-2-shapes-describing-2d-shapes/ | Scroll down to the $4^{\text {th }}$ box to complete another 2D shapes quiz: https://www.bbc.co.uk/bitesize/topics/z jv39j6/articles/ztpwdmn | Making patterns with 2D shapes Level 3: <br> https://www.topmarks.co.uk/orderi ng-and-sequencing/shape-patterns | Sort 2D and 3D shapes: <br> https://www.education.com/ <br> game/2d-3d-shapes/ |
| Problem/ activity of the day | (Lesson 1 resources below) MAKING LINKS: We learnt about solid shapes such as spheres, cuboids, cubes and pyramids in Year 1. Look below to remind yourself. <br> THINK:(support below) <br> Can you help me with this problem? Do the objects in this video have flat faces or curved surfaces? Or both? What 2D shapes can you see on the flat faces of the 3D shapes? <br> SEE: (model below) <br> Scroll below to see if each shape had flat faces, curved surfaces or both. You will also find out which 2D shapes were found on the flat faces. <br> DO: Use what you have learnt today to solve the problems below. | (Lesson 2 resources below) MAKING LINKS: Yesterday we learnt to recognise a range of 3D shapes. <br> THINK:(support below) <br> Can you help me with this problem? How many faces, edges and vertices do my 3D objects below have? What shapes are the flat faces? If you can find similar shaped objects in your household, this will help you to find the answers! <br> SEE: (model below) <br> Look at this video here to remind yourselves what faces, edges and vertices are and to help you find these features on one of my objects. <br> DO: <br> 1. Find the faces, edges and vertices of similar 3D shaped objects in your own house. <br> 2. Use what you have learnt today to solve the problems below. | (Lesson 3 resources below) MAKING LINKS: Yesterday we learnt to describe 3D shapes. Remind yourself what faces, edges and vertices mean. <br> THINK:(support below) <br> Look at my set of 3D shapes below. I can't figure out how to sort them into groups! Can you help me? Try to sort them in different ways. <br> SEE: (model below) <br> Look below to see how I grouped my 3D shapes by size. How did you group yours? <br> DO: Use what you have learnt today to solve the problems below. <br> Challenge: Can you explain your answers in a statement? | (Lesson 4 resources below) MAKING LINKS: We learnt about making patterns in Year 1. Not sure? Look below to remind yourself. <br> THINK:(support below) <br> Can you help me with the problem below? What is missing in the pattern? How do you know? <br> SEE: (model below) <br> Watch this video to remind ourselves how to find the missing shape in pattern. You can also find another example below. <br> DO: Use what you have learnt today to circle the missing shape in each pattern. <br> Challenge: Can you create a 3D shapes pattern using solids that you can find at home or by drawing them? | Revision online games: (Optional) <br> a) Identify $3 D$ shapes game <br> b) Group the 3D shapes game. <br> DO: <br> The quiz below <br> Challenge: <br> Can you find 3D shapes in your house? <br> - 3 cuboids <br> - 3 cylinders <br> - 3 cubes <br> Can you create your own pattern using these solids? |
| Methods, tips \& clues | THINK video clip: above SEE model: below (day 1) | SEE model: below (day 2) SEE video clip: above | THINK problem: below SEE model: below (day 3) | THINK problem: below SEE video clip: above | None |
| Time to check | Answer sheet at the bottom of the document | Answer sheet at the bottom of the document | Answer sheet at the bottom of the document | Answer sheet at the bottom of the document | Answer sheet at the bottom of the document |

## cube

## cuboid


pyramid

## sphere



Quality First Education Trust

THINK: Do these objects have flat faces, curved surfaces or both?


## SEE:



The tennis ball is shaped like a sphere. The sphere has a curved surface.


The can of coconut milk is shaped like a cylinder. A cylinder has flat faces and a curved surface. The flat faces are circles.


The party hat is shaped like a cone. A cone has a curved surface and a flat face. The flat face is a circle.

DO:

1. Circle the correct answer OR write your answer in your book to show if each object has a flat face, a curved surface or both.
a.


Has (curved surface/flat face/both)


Has (curved surface/flat face/both)
c.

Has (curved surface/flat face/both)
2. Match

cuboid

cube

sphere

cone


## THINK: Do these objects have flat faces or curved surfaces?



SEE: Watch the video to see how we find faces, edges and vertices OR look at this image to help you see what to look for.

Face


Edge

DO:
Describe each of the following shapes by completing the table:

|  | Name | Number of <br> faces | Number of <br> vertices | Number of <br> edges |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

Challenge:
What 2D shapes can you see on the faces of the shapes?

1) $\qquad$
2) 
3) $\qquad$

THINK: How could I sort these 3D shapes into different groups?


SEE:I could group these by size.


DO: Have these shapes been grouped correctly? Challenge: Explain your answer.


Quality First Education Trust

$\bullet \bullet \bullet \bullet$ •
■ாாா


THINK: What is missing in the pattern? How do you know?


SEE: Watch the video to find the missing shape.


The missing shape is a
The pattern is a cuboid, a cube and a cylinder.
This is a pattern using different shapes.


DO: Circle the missing shape in each pattern.


b)

c)
)


Quality First Education Trust
a) Circle the solids that have a curved face:

b)

|  | Name | Number <br> of faces | Number <br> of <br> vertices | Number <br> of <br> edges |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

c) Circle the right answer.


Quality First Education Trust

## Answers: Day 1



## Day 2:

DO:
Describe each of the following shapes by completing the table:

|  | Name | Number of <br> faces | Number of <br> vertices | Number of <br> edges |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Cube | 6 | 8 | 12 |
|  | Cyramid | 5 | 5 | 8 |
|  | Cone | 2 | 1 | 1 |

## Challenge:

What 2D shapes can you see on the faces of the shapes?

1) squares
2) triangles, square
3) circles
4) circle
5) rectangles, triangles

Quality First Education Trust

## Day 3:



These 3D shapes are grouped correctly as they have been grouped by their size. The first box have large 3D shapes and the second box has small 3D shapes.

These 3D shapes are not grouped correctly. The cone should not be in the first box as it is red and not blue.

These 3D shapes are grouped correctly. The first box has 3D shapes with only flat faces. The second box had 3D shapes with some curved surfaces.

## Day 4:

## DO: Circle the missing shape in each pattern.


a)

b)

c)


## Day 5:

| a) sphere, cone, cylinder |
| :--- |
| b) |
| Name Number <br> of <br> faces Number <br> of <br> vertices Number <br> of <br> edges  <br>  cube 8 12  <br>  Square <br> based <br> pyramid 5 5 8 |

c) Circle the right answer:

1) cuboid
2) cylinder
3) cylinder
4) Yes, flat surfaces/curved surface
5) pyramid
6) 



