

The Flourish Federation—Knowledge Organiser

Brookfield Infant and Junior Schools



Subject Focus:

Maths

Year 1 - Term 2

Geometry — Shape

What? (Key Knowledge)

Recognise and name common 2D shapes (rectangle, square, triangle, pentagon, hexagon, octagon, circle)

Recognise and name common 3D shapes (cube, cu-

What? (Key Vocabulary)

Vocabulary Comments

2D — sides, cor-

Flat shapes

3D - faces

The flat or curved parts which cover

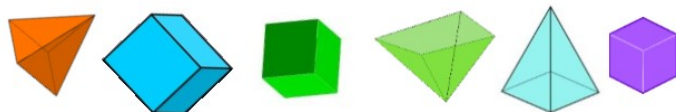
3D - vertices

The points on shapes where the edges

3D - edges

The straight or curved parts where the

Visuals/Diagrams



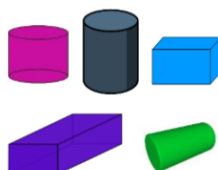
What 2D shapes can you see on the faces of these 3D shapes?

Ensure children see shapes in difference orientations so they develop a deeper understanding of the whole shape. The orientations of the shape does not effect it's properties.

Sort the shapes into the groups.

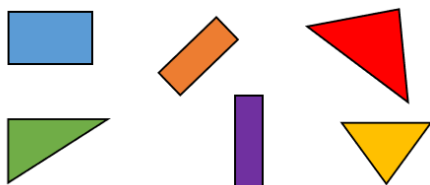
cylinders

cuboids



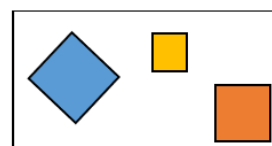
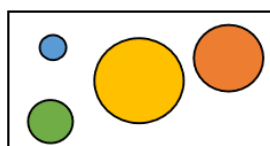
Discuss the differences and similarities between squares and rectangles and cubes and cuboids.

Circle the triangles, tick the rectangles and draw a circle and a square.



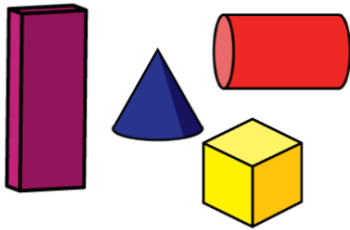
Ensure to discuss the shapes properties and use this information to group and name the shapes.

How are the shapes grouped? Label each group.



Examples of Reasoning

How many ways can you sort the shapes into groups?



Possible answers:

Straight faces and curved surfaces.

Shapes with a circular face and shapes with a square face.

Big shapes and small shapes.

Children may reason about different shapes depending on if the shapes have flat or curved surfaces.

Use 3-D shapes to build a tower.

Which shapes are the best for the bottom of the tower?

Which shapes can only go on the top of the tower?

Can you use any of the shapes only in one orientation?

Amir and Eva are making patterns.

Eva



Amir



Eva

Our patterns are exactly the same.

Our patterns are different.



Amir

Who do you agree with?

Explain your answer.

Amir is correct because the triangle is in a different orientation.

Examples of Problem Solving

Tommy says that all shapes with 4 sides are squares.

Is Tommy correct?
Prove it.

Tommy is incorrect as there are many other 4-sided shapes including rectangles.

Use a selection of triangles, rectangles, squares and circles.



Put your shapes into groups.

Ask a partner to label your groups.

How many different groups can you create?

Possible ways of sorting:
Colour, name of shape, number of sides etc.

ICT Opportunities

Purple Mash:

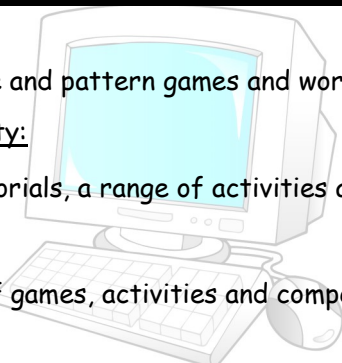
- Many shape and pattern games and worksheets

Education City:

- Videos, tutorials, a range of activities and games

Manga High:

- A wealth of games, activities and competitions



Daily Maths

- Questioning during the register (How many people are absent? How many children are here? How many more children have school dinners than packed lunch).
- Lining up games - counting on/back, 2x, 5x and 10x table games
- Days of the week/months of the year

