

<i>Maths</i>	<i>2-D and 3-D shape</i>
<i>KS1</i>	

Date:

By the end of these activities:	Most Pupils Will...Be able to recognize 2-D and 3-D shapes as different to one another
	Some Pupils Will...Be able to categorize and name some 2-D and 3-D shapes
	A Few Pupils Will...Be able to recognize the difference between 2-D and 3-D shapes, be able to name and categorize ALL shapes and be able to continue patterns.

Cross- Curricular Links



English

Fine motor skill development, pencil control, speaking and listening, following two step instructions



Maths

Shape recognition, continuing patterns. Technical vocabulary linked to shape.



Science

Make links to various materials through choosing shape objects.



Geography

Reference to countries when sharing shape landmarks and reference to the understanding that the Earth is a sphere.



Art

Safely use and explore a variety of media and materials, tools and techniques.



PSHE

Turn taking and appropriate communication, both verbal and non-verbal.



PE

Opportunity to improve agility, balance and coordination

Activity	Step by Step	Resources	Sensory Input	✓		
				A c h i e v e d	R e v i s i t	R e d o
<p>Activity 1- Tell me what you know</p> <p><i>To develop/discover, etc.</i></p> <p><i>I can understand what a 3-D shape is</i></p>	<p>Ask children what makes a 3-D shape- Explain that 3-D stands for three dimensional meaning the shape has three different dimensions, length, width and depth. Offer time and space for children to explore shapes from all sides to understand the term 3 dimensional. Offer 2-D shapes for comparison.</p> <p>-Cuboids (including cubes), pyramids and spheres.</p> <p>https://www.bbc.co.uk/bitesize/topics/zjv39j6/articles/zcsjqtq</p> <p>Key questions</p> <p>What makes a shape 3-D?</p> <p>What 3-D shapes can you see in the learning environment?</p> <p>What is the name of this 3-D shape?</p> <p>Do all cubes look the same?</p> <p>Does the shape change when you turn it around?</p> <p>Can you think of any everyday objects that are cones/cubes/cylinders?</p>	<p>ICT equipment (for video)</p> <p>Various everyday 3-D shapes</p> <p>2-D shapes</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile ✓ Taste ✓ Smell 			

<p><i>Activity 2- finding and naming activity</i></p> <p><i>I can recognise and name 3-D shapes</i></p>	<p>-Which shape is the odd one out? Offer various shapes of one type, then add one other shape, e.g.; four cuboids and one sphere- Ask learner to point to/stand next to/balance on one leg next to the sphere. Repeat with different shapes.</p> <p>-Offer various shapes (cylinders and spheres), ask learner to group shapes, (bag, box or basket may work well with, 'I'm going shopping for spheres, can you help me to fill my basket?' offering commentary on the characteristics of each shape 'the sphere has 1 continuous face and no edges, the cylinder has three faces and two edges' Faces can be drawn to represent faces in whiteboard pen.</p> <p>-Can it roll? Play pass by rolling shapes along the floor, spheres will roll, cylinders will roll if placed a certain way and shapes with multiple flat faces will not- use the opportunity to discuss the properties of each 3-D shape and ask learner to draw chalk around the shapes that have flat faces.</p>	<p>Various everyday 3-D shapes, balls, tins, boxes, pyramid shapes</p> <p>Images of pyramids</p> <p>Chalk</p> <p>Whiteboard pen</p> <p>Basket/box (for shopping vessel)</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile ✓ Taste ✓ Smell 			
<p><i>Activity 3- = Sorting activity</i></p> <p><i>I can sort 3-D shapes</i></p>	<p>-Can we sort the shapes? Offer learner the shapes used in last lesson. print or draw a sphere, cylinder, cube, cuboid and pyramid on the front of each box. Explain to learner that today we are going to be sorting them. This can be made fun and interactive by creating a competition where shapes can be thrown into the corresponding box from a distance.</p> <p>Incorporate bananas and oranges at snack time and make links to properties of a sphere and cylinder.</p> <p>Not quite got it? Model finding a shape and throw into correct box and ask learner to also find that shape.</p> <p>Need an extension? Group shapes into number of faces/edges.</p>	<p>3-D shapes</p> <p>Five boxes</p> <p>Printed shape label or hand drawn image</p> <p>Banana</p> <p>orange</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile ✓ Taste ✓ Smell 			
<p><i>Activity 4- I spy with my little eye</i></p> <p><i>I can Recognise 2-D shapes</i></p>	<p>Recap on previous learning and explain that when shapes do not have 3 dimensions (height, width and depth), that they are classed as 2 dimensional.</p> <p>Move around the environment naming various 2-D shapes and emphasizing what sound they begin with (offer visual prompts or draw initial sound on each object with whiteboard pen)</p> <p>Explain the rules of I spy or model.</p> <p>Say rhyme 'I spy with my little eye, something beginning with....'</p>	<p>A range of 2-D shapes.</p> <p>Whiteboard pen.</p> <p>Alphabet cards</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile ✓ Taste ✓ Smell 			

	<p>Provide opportunity for learner to identify/name or physically retrieve each shape before offering a turn.</p> <p>Not quite got it, show each shape and comment on key features 'it has one continuous edge that goes all the way around...It's a circle' incorporate description in I spy rhyme.</p> <p>Need an extension? Provide opportunity for learner to play game with peers.</p>				
<p>Activity 5 <i>What shape is it?</i></p> <p><i>I can name 2-D shapes</i></p>	<p>Shape snap!</p> <p>Introduce each shape card and recap on the last lesson's learning points.</p> <p>Play shape snap, instead of snap, shout the shape name.</p> <p>Not quite got it- Model language to describe shape, show all of the cards to learner and ask if they can find a matching shape.</p> <p>Need and extension? Add new shapes such as star and diamond. Or, vary shapes to triangles that have different length sides.</p>	<p>Shape cards containing 2-D shapes</p> <p>Circle, square, rectangle, triangle</p> <p>(introduce star and diamond if learner shows good understanding of previously taught shapes)</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile 		
<p>Activity 6 <i>Sorting activity</i></p> <p><i>To develop/discover, etc.</i></p> <p><i>I can sort 2-D shapes</i></p>	<p>Provide learners with various 2-D shapes, circles, squares, rectangles and triangles.</p> <p>Encourage learner to draw large shape on the floor by following each description. Adult describes a shape with four sides that are equal in length, learner draws large square.</p> <p>Learner will then be encouraged to find as many 2-D squares as they can to fill the drawn square. Offer knowledge that rectangles also have four sides but not all sides are equal in length.</p> <p>Continue for other 2-D shapes and encourage learner to name each shape as they find them.</p>	<p>2-D shapes.</p> <p>or</p> <p>Everyday 2-d shape images printed on paper.</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile 		

<p>Activity 7 Pattern play</p> <p><i>I can spot patterns with 2-D and 3-D shapes</i></p>	<p>Learner to create various patterns with either 2-D, 3-D or a mix of both shapes.</p> <p>Not quite got it? Create pattern and model language of key features to learner, ask 'what comes next'. Can learner continue the sequence.</p> <p>Need an extension- can children create patterns linked to colour, a mix of 2-D and 3-D shapes that correspond to one another e.g Circle/cylinder, square/cube, rectangle, cuboid etc.</p>	<p>Examples of previously made patterns.</p> <p>A range of everyday 2-D shapes/ 3-D shapes.</p> <p>Printed images of 2-D and 3-D shapes</p>	<ul style="list-style-type: none"> ✓ Auditory ✓ Visual ✓ Proprioception ✓ Vestibular ✓ Tactile ✓ Taste ✓ Smell 	
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Making Sense
Award