School Radio

Primary - Maths

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School Radio 2014

The date	The subject Maths		Class		Teacher	
Starter	**Levels/Criteria**	**Whole class input:**	**Differentiated/ target groups:**	**Plenary:**	**AFL:**	**Class list:**
Each table to have a selection of 2d and 3d shapes on their table: Freely explore and discuss, using questions below to prompt table/partner talk. **Table resources: Questions** Placed on each table to begin discussion. Cards attached. (a seating plan may be required to maximise the potential of all: To dilute skills and enable them to transfer fairly through each group).	**Level 1** When working with 2D and 3D shapes, pupils use everyday language to describe properties and positions. They measure and order objects using direct comparison, and order events. **Level 2** Pupils use mathematical names for common 3D and 2D shapes and describe their properties, including numbers of sides and corners. They distinguish between straight and turning movements, understand angle as a measurement of turn, and recognise right angles in turns. They begin to use everyday non-standard and standard units to measure length and mass. **Level 3** Pupils classify 3D and 2D shapes in various ways using mathematical properties such as reflective symmetry for 2D shapes. They use non-standard units, standard metric units of length, capacity and mass, and standard units of time, in a range of contexts. **Level 4** Pupils make 3D mathematical models by linking given faces or edges, draw common 2D shapes in different orientations on grids. They reflect simple shapes in a mirror line. They choose and use appropriate units and instruments, interpreting, with appropriate accuracy, numbers on a range of measuring instruments. They find perimeters of simple shapes and find areas by counting squares. Source: http://www.education.gov.uk/schools/teachingandlearning/curriculum/primary/b00199044/mathematics/attainment/ma3	Using the file attached: "properties_of_2D_3D_Shapes from Primary resources website" Sourced from: http://www.primaryresources.co.uk/maths/mathsE3.htm Open the powerpoint and use as a discussion point: Questions and answers to whole class: Asking children: What shapes they have, what are they? Can they describe the properties of each shape. FACT INPUT: State the difference between 2d and 3d shapes. FACT INPUT: Explain the key terms: face, edge and vertice. Assign roles in pairs. These can be changed throughout the lesson/lessons: Giving each child an opportunity to ask and answer questions: Using Radio equipment, make a **"THE SHAPE PROGRAMME"**. The interviewers ask the interviewees set of questions: See the attached script for ideas. RECORD EACH TABLE'S INTERVIEW.	SEN: Modelling ideas. Support with knowledge on shape properties: Print out from IWB required. Lower ability: As above. Middle ability: Some prompting. Independent work. Blank scripts given to encourage writing their own questions and answers: Prompting further reasoning. Higher ability: Independent work with blank scripts, as above.	Listen to selected pieces from interviews highlighting strengths and relevant skills. Children contribute in ideas to improve interview: Are the key facts accurate? **Key question:** What is a 3d shape? How would you describe it? Which shape has the most sides?	Whole class learning? Future improvements: Extension: Create an interview throughout the school: Interviewing teachers and other classes. **Note for 2a - Cross reference to English** En1 Speaking and listening: Speaking 1. To speak clearly, fluently and confidently to different people, pupils should be taught to: b. choose words with precision En1 Speaking and listening: Breadth of study 8. The range should include: c. describing events and experiences En1 Speaking and listening: Breadth of study 10. The range of purposes should include: c. commenting and reporting En3 Writing: Breadth of study 9. The range of purposes for writing should include: a. to communicate to others d. to organise and explain information	

Resources:	Notes/Resources	
Using the file attached: "properties_of_2D_3D_Shapes from Primary resources website" Sourced from: http://www.primaryresources.co.uk/maths/mathsE3.htm	Useful lesson plan ideas for further teaching and powerpoint resources: http://www.tes.co.uk/teaching-resource/Shape-Lesson-Plan-6066115/	
Some useful hand outs: http://www.readwritethink.org/classroom-resources/lesson-plans/going-shape-hunt-integrating-776.html?tab=3#tabs	Lesson plan and online 2d and 3d songs: http://www.bbc.co.uk/schools/teachers/ks2_lessonplans/maths/shapes.shtml	
Interactive and hand outs: http://www.teachingideas.co.uk/maths/contents_shape.htm		

Starter activity: Keystage 2

Differentiated levels, that can be changed.

How many sides are there on a 2d shape? How many sides are there on a 3d shape? Why are they different?	Which shape is your favourite? Is it a 2d or a 3d shape? Why do you like it? Do any shapes remind of you another object? A spaceship? A moon?
How many vertices does a cuboid have? How many vertices does a cube have? Are they the same? Why?	Why is a 2d shape different to a 3d shape? Can you find a 3d shape with the most sides? Can you find a 3d shape with the most vertices? Are they the same shape?

Script title: The Shape Programme.	Name:	Date:

Interviewer:	Which of these shapes are you favourite?
Interviewee:	
Interviewer:	Why do you like it?
Interviewee:	
Interviewer:	How many vertices does it have?
Interviewee:	
Interviewer:	What is the difference between a 2d and a 3d shape?
Interviewee:	

Script title: The Shape Programme.	BLANK COPY	Name:	Date:

Interviewer:	
Interviewee:	
Interviewer:	
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