Shakers

Students learn about Diameter, Radius and Circumference. They all Start with a paper plate, ruler and piece of string and have to answer questions correctly to earn felt tips. The more questions students get right, the more colours they can use on their plate. The Next task is to use digital scales to accurately measure 20 Grams of peas (to a tolerance of +/- 2g). With a little skill, glue, tape and patience the shaker is then completed.

Location:	Any Room/Hall.
Group size:	4-60.
Recommended Level:	KS2.
Cost:	£2 per Student.
Consumables:	Glue, Ink, Dried Peas, Paper Plate, Misc art materials
Tools and Equipment:	Digital Scales, Scissors, Plastic cups, Marker Pens.
Staffing:	Mr. Emanuel, Mr Woodward & Engineering Leaders.
Time needed:	Minimum 1 hour.
Extension Tasks:	Students learn how to make different sounds from the same instrument this is know as timbre. Students are given a script and asked to use their instrument to perform the sound FX for the story. Students could also go on to write their own story with Sound FX. School assembly.

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Curriculum Areas:
Engineering
Resistant Materials
Art
Design
Literacy
Maths
Science
Music

Software used: n/a

Subject Specific words

Tools and Equipment:
Digital Scales
Ruler
String
Felt tips
Sticky Tape
Insulation Tape
Glue Stick
Plastic Cup
Paper Plate
Dried Peas

Health and Safety:
Sharp objects
Small objects

Other:
Circumference
Radius
Diameter
Paper
Circle
Gram
Measurement
Timbre
Millimeters
Tolerance
Colour
Design

Functional Skills:
Hand Eye Co-ordination
Using appropriate tools and equipment
Art and Design Skills
Shape and size
Mathematical
Safe use of tools and equipment
Working on a Focused Practical task
Team Work
Creative thinking
Working to a deadline and completed product

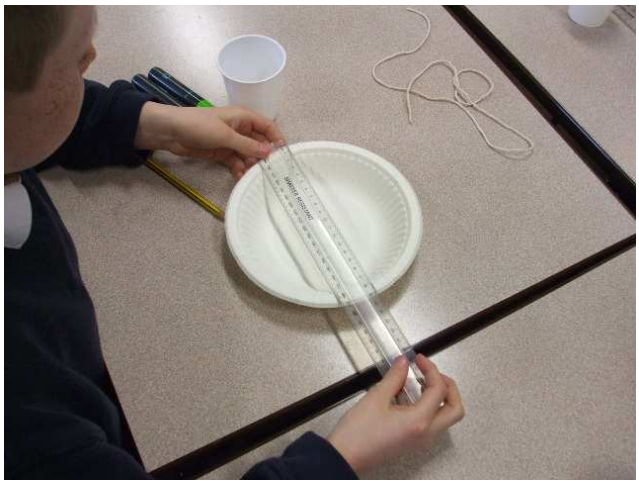
PLTs:
Creative Thinkers
Self Managers
Independent enquirers
Effective participators

Every Child Matters: Enjoy and Achieve

Engineering

Specialist Schools Trust
EXCELLENCE AND DIVERSITY

Diameter



Circumference

Radius