



# Topic Activities

Date: 08.06.20

Lessons 1 and 2 will be taught at school. whatever days your child attends. This means you can work on activities 3 and 4 from home on your 'off' days. If you are continuing to learn from home, then you can work through the activities in whichever order you wish ☐

Lesson	Activity	Guidance for Parents								
1	<p><b>PSHE:</b> How do we show someone we care? Can you think of ways that you let the special people in your life know that you love them? What things would you normally do for them to show that you care? Watch the following video: <a href="https://www.youtube.com/watch?v=2PnnFrPaRgY&amp;feature=youtu.be&amp;fbclid=IwAR0k22WRMZYH-WyNRaM00epp1LpDcYFcg-acZ1RnMJvt6yBfp_YpNIGx-Aw">https://www.youtube.com/watch?v=2PnnFrPaRgY&amp;feature=youtu.be&amp;fbclid=IwAR0k22WRMZYH-WyNRaM00epp1LpDcYFcg-acZ1RnMJvt6yBfp_YpNIGx-Aw</a> Choose somebody that you are missing right now and think of a way you can show them you care. Perhaps it will be one of the ideas in the video or maybe you have a great idea of your own!</p>	<p>This will hopefully help your child feel more connected to those they are unable to see or to hug right now. This will also help your child understand why things are different if they have returned to school and to find new ways to show their friends they care.</p>								
2	<p><b>Science:</b> This week we are going to investigate materials that are bendy. Can you think of any items in your home that bend? Why do is this an important property for this item? Explore some of the following items in your home: a hair band or elastic band, spoon, tape measure, table and door. These are just examples; you can investigate as many items as you wish. Which items bend? Why? Could you tie your hair with a hair band if it was not bendy? Was the table bendy? If not, why?</p>	<p>Encourage your child to investigate a variety of objects around the home to see if they are bendy or not. Encourage them to give reasons as to why an object may or may not be bendy and how it affects its use. If you like, you could record your findings in a table like so...</p> <table border="1"> <thead> <tr> <th>Object</th> <th>Material</th> <th>Bendy or not bendy?</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Object	Material	Bendy or not bendy?	Reason				
Object	Material	Bendy or not bendy?	Reason							
3	<p><b>DT:</b> Spaghetti bridges Last week you made models. This week you are also going to be doing some building but we are going to focus on what makes a strong structure. See page 2 of this document for full instructions. Before you complete the challenge, I'd like you to draw you design first. Follow your design and note any changes as you make them.</p>	<p>If you don't have spaghetti to hand then feel free to improvise. The important skill here is to explore different structures and how to make them stronger.</p>								
4	<p><b>P.E. - Ball Skills Lesson 2</b> <i>Please see separate plan in page 3 of this document</i></p>									

# SPAGHETTI BRIDGES

## ENGINEERING CHALLENGE 03

Designed by Kristian,  
Design engineer at Dyson

### The brief

Construct a free standing bridge out of spaghetti, strong enough to support a 250g bag of sugar.

### The method

Think about bracing strands together for strength. Some shapes are better at absorbing loads – triangles are particularly strong. Rubber bands make for good junctions.

### Top tip

Be patient. Through trial and error, you'll become proficient at working with spaghetti.

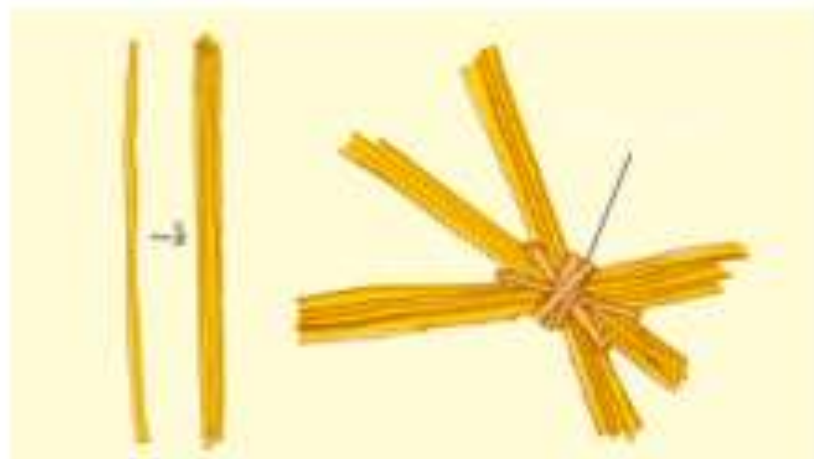
### Materials

Spaghetti

Small rubber bands  
or bag ties

Sticky tape

250g bag of sugar



### How does it work?

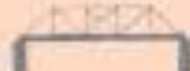
Bridges manage two important forces: compression and tension – pushing and pulling. Too much of either and they buckle or snap.

### Design icons

Why not take inspiration from these iconic bridge designs?



Beam bridge



Truss bridge



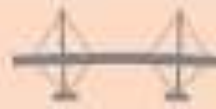
Cable stayed bridge



Arch bridge



Suspension bridge



Cantilever bridge

# Ball Skills Lesson 2

## Learning Objective

To be able to roll a ball to hit a target.



## Warm up - Traffic light warm up

Jog around your work space. Listen out for the following colours and respond accordingly:

Green: run around

Amber: jump on the spot

Red: Freeze

Traffic Jam: walk

Reverse: walk backwards.

## Activities

1	Can you push the ball around a cone using both hands without losing control of the ball? Can you use one hand and then the other hand? Can you push the ball between two cones using your fingers?
2	Using two cones (or other objects) make a 'gate' to roll the ball through. If possible, make a series of gates in your work space and practise pushing the ball through them. How many gates can you push the ball through in 30 seconds? How about 60 seconds?
3	See if you can roll the ball to hit one of the cones. Each time you manage to hit the cone take a small step backwards. To make this more challenging, work with a partner to roll the ball towards a moving target such as your partners feet.

## Cool Down

Stand still and stretch upwards, then slowly bend forwards over until you can touch the floor, hold for a count of 5. Sit on the floor with crossed legs, taking in a deep breath as you lift your arms up above your head. Hold for a count of 3 then breathe out and repeat 3 times. Try holding your breath for a count of 5 and repeat.

Don't forget you can email your class teacher to let them know how you got on with this activity or share pictures of you and your family doing it together.

[redclass@abacus.essex.sch.uk](mailto:redclass@abacus.essex.sch.uk)

[orangeclass@abacus.essex.sch.uk](mailto:orangeclass@abacus.essex.sch.uk)