

Fun/STEM/HE

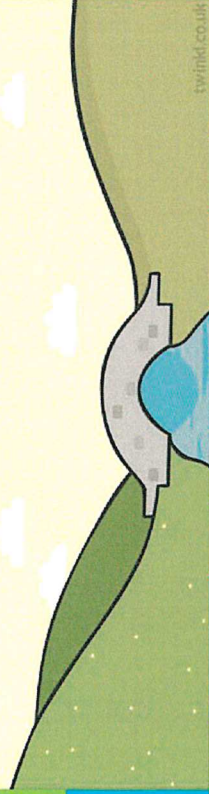
Activity

Three



Building Challenge!

Use your building bricks to build a bridge.



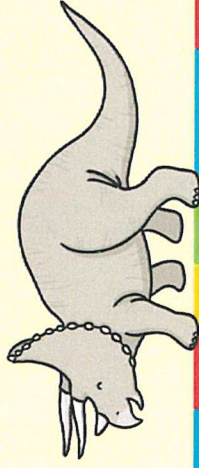
Building Challenge!

Use your building bricks to build a catwalk and host a fashion show.



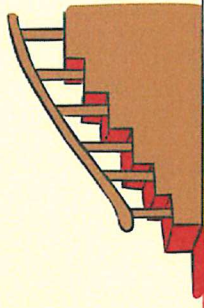
Building Challenge!

Use your building bricks to build a dinosaur.



Building Challenge!

Use your building bricks to build a staircase.



Shark pepper experiment

Black pepper

water

Dish washing liquid

sugar

Get a bowl of water and add pepper to it.

Put a drop of soap of dish washing liquid on your finger then put finger in the water.

Watch the pepper move. Add sugar to the water to see the pepper come back together.

Egg in a bottle

- a milk bottle
- a hard boiled egg
- a small piece of paper
- a lighter or matches

Light a piece of paper and carefully place it in the bottle. Then quickly pop the egg back in the neck of the bottle. The egg will be sucked into the bottle and remain fully intact.



STEM Sound Amplifiers Activity: Engineering Design Process

Sound volume can be increased for various purposes. In fact, scientists and inventors have been working for over a century to create devices to amplify sound.

Remember the science: to amplify sound means to make the sound waves taller. Sound waves travel better through some materials than others. Sound cannot travel through a vacuum. The volume of the sound we hear can be increased by funnelling it towards our ears – our outer ears already do this a bit! A hollow 'box' made of hard material can also amplify sound. A small sound vibrates through the hard material and is projected away from the source.

When designing items, engineers use the Engineering Design Process. The steps are:

- ask a question about what you can create;
- imagine what you can create;
- plan your creation;
- create it;
- improve your creation.

You have been hired by SoundAmp to create a device that will amplify the sound on a cell phone. How can you engineer a way to make the phone volume louder? You must use readily available household items. The items you could use are listed below:

- ceramic cup
- cardboard tube
- paper
- ceramic bowl
- drinking glass
- paper cup

Chicken and Chilli Sauce Wraps

Ingredients:

1 chicken breast
Olive oil
2 wraps
Chilli sauce to taste
Mixed salad leaves

Equipment:

red/green chopping boards
frying pan
vegetable knife
Wooden spatula
2 small plates
2 large plates

Method:

1. Collect equipment and ingredients.
2. Slice chicken into even sized pieces.
3. Heat oil in pan and add chicken.
4. Cook chicken until juices run clear and all chicken meat is white.
5. Heat wraps in microwave for 1 minutes.
6. Place chicken in wrap, add chilli sauce and salad leaves.
7. Fold wrap and enjoy

Week 3& 4 : Home Economics KS3 and KS4

Please find below tasks some pupils may be able to complete or experience with support at home.

Daily Tasks

Please find below tasks some pupils may be able to complete or experience with support at home.

- Encourage pupils to set the table every night, assist or wash and dry dishes away in the correct places also.
- Encourage pupils to make their bed everyday if they can and tidy their rooms.
- Where possibly as a family talk about what will be made for lunch and dinner every day. Make simple lunches and teas.
- Recycling: Encourage pupils to recycle items properly using the bins provided

Multi-Cultural foods:

Please find below tasks some pupils may be able to complete or experience with support at home.

- Find different countries on the world map
- What foods are eaten in these different countries?
- Talk about the foods eaten
- Research different cooking methods, different equipment and utensils in different countries.
- Opt: Print out, stick in and label pictures on paper.
- What popular foods are eaten in Italy, China, and India?
- Discuss where can ingredients be bought? Are there any specialist foods shops in your area?
- Work out the cost of some of the recipes below for your family:
- Sweet and sour chicken
- Chicken fajitas
- Tacos
- Pizza Base - add toppings
- Champ

Design poster/information leaflets on different countries, cultures and foods.

Useful website: www.foodafactoflife.org.uk

Chilli Potato Wedges with cheese



Ingredients

Potatoes

Chilli Sauce

Sour cream

Olive Oil

Cheese

Equipment

Grater

Plate

Brown Chopping Boards

Vegetable knife

Pot stand

Colander

Baking Tray

Knife/Fork

Gather equipment and put oven on to 190

Wash and chop potatoes into thick wedges/chunks

Place on baking tray

Toss in olive oil

Add chilli powder (opt)

Bake in oven for 20 minutes

Grate cheese

Add cheese, put back in oven for 5 minutes

Serve with chilli sauce and sour cream