

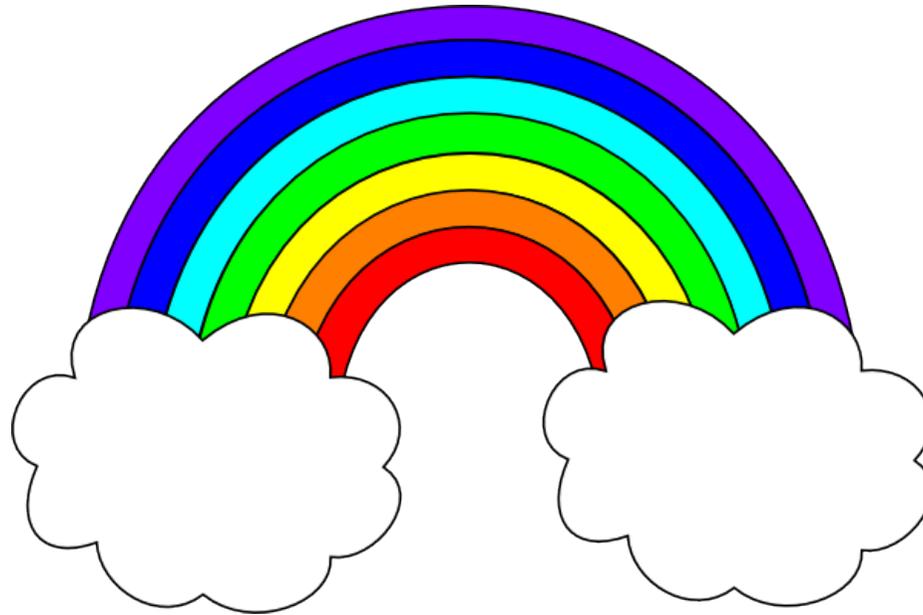
W/C 15.06.2020

Hi Year 4, What made you smile this week? What are you thankful for?

During these times, it is important to reflect on these things and make sure we do not take for granted what we have.

We can't wait until we are all together again as an SMA family but until then, please remember to stay safe. Here are your activities for the week. We would still love to see what you are all up to.

Keep up to date on daily challenges and catch up with friends and teachers via our blog: <https://app.seesaw.me/#/login>



## Science

Our new topic this term was going to be all about sound and how it travels to our ears so we can hear it.

Watch the PowerPoint shown on the website and the YouTube videos to explore how sound is created.

Below, see if you can have a go at some of this sound experiments at home. Can you explain where the sound is coming from?

### Activity One - The Classic Paper Cup and String Phone

#### **What you need:**

- 2 paper cups
- String
- A sharp pencil or needle to poke holes in the cups
- Scissors

#### **What to Do:**

1. Start by cutting a long piece of string of at least 15m.
2. Poke a small hole at the bottom of each cup.
3. Using each end of the string, thread it through the bottoms of the cups, tying a large knot so that the string does not fall out of the cup. If you make the holes too large, use a paper clip to hold the string in place so that it does not pull out of the cup.
4. Move into position and ask your parent to move away from you so that the string is far enough to make it tight. Be sure that the string does not touch any other object and that it remains suspended in air as you complete the experiment.

5. Taking turns, talk into the cup, while the other person listens by putting the cup to their ear. Tell your parent to repeat what he or she hears after you have spoken and do the same in return!

What do you think is happening? How is sound travelling?

*Answer – read after experiment - sound waves created by talking through the cup travel through the line to the other end, converting back to sound on the opposite side!*

### Activity Two - listening to sounds travel underwater

Sound travels well through air, but it travels even better through water! This easy sound experiment for kids can be done in a jiffy out on the back porch.

#### **What you need:**

- A bucket filled with water
- A large plastic water bottle
- At least 2 kitchen knives (used by an adult!)
- Scissors or sharp knife (used by an adult) to cut the bottle

#### **What to Do:**

1. After filling the bucket with water, ask your parents/ carers to take a sharp knife and cut off the bottom of the plastic water bottle. Be sure that the cap is taken off of the bottle.

2. Place the bottle in the water so that the cut bottom is in the water. Put your ear to the top of the bottle to listen.
3. Using the kitchen knives, ask your parents/carers to clang them together to make a sound, but do this in the bucket as you are listening. What can you hear?

*ANSWER - READ AFTER THE EXPERIMENT - You'll probably note that the sound of the clanging is loud and clear. Water travels faster through water than in the air, and animals that live underwater are able to hear sound clearly.*

### **Activity three - See the Sound**

Sound vibrations travel through air, water, and even solid objects, but it's not possible to see the waves. What if we could see the waves in another way? This science of sound experiment makes sound more visible by forcing objects to react to the sound vibrations.

#### **What you need:**

- Empty clear mixing bowl
- Cling film
- Large elastic band
- Sugar or rice

#### **What to Do:**

1. Wrap a sheet of cling film over the mixing bowl so that it's tight, and secure with the large rubber band. Be sure that the cling film is tight and does not sag.

2. Place a few of the sugar crystals or rice on the top of the cling film, placing them in the middle of the wrap.
3. Get close to the sugar crystals/ rice and say something loudly! What happens to the crystals/rice? Do they move?
4. Experiment with louder and softer words or sentences to watch the sugar crystals/ rice react to the sound vibrations!

*Answer - read after experiment - While you might think it's your breath making the crystals/rice jump and move, it's actually the sound vibrations. Try different sounds besides ordinary speech and see how the crystals/rice come to life!*

#### **Activity Four - Experimenting with wound waves**

It might be hard to imagine that sound waves can travel through solid objects as well as through the air. This simple but exciting sound waves science activity will demonstrate how sound can and does indeed travel through solid objects!

What you need:

- Metal kitchen spoon
- At least 8m of string

#### **What to Do:**

1. Stretch out the string and tie the handle of the spoon in the middle of the string.
2. Take one end of the string and tie around your index finger. Do the same using the other end, but tie this string around the index finger of your opposite hand.
3. Put your fingers, with the string wrapped around each, into your ears.
4. Lean over so the spoon dangles and swing the spoon so it hits a nearby door or wall.
5. Hit the door or wall again, but this time with more force. What do you hear?

*Answer - read after experiment - You should hear a bell-like sound travel up the string from the spoon and into their ears. The sound waves created from the spoon hitting the door moves through the string until he or she is able to hear it!*

## P.E.

### Balloon Tennis

What you need: Balloon

Area: Setting up something in between two sides (tennis court style)

Players must be on bottoms.

Alternate serving, all shots must be underarm (so balloon goes up)

Point scored every time the balloon touches the floor.

### Football style skills and drills

What you need: Football / Tennis ball

Level 1 - Bounce the ball onto your thigh and catch it.

Level 2 - Bounce the ball onto your thigh and then onto the second thigh and catch it.

Level 3 - Bounce the ball onto both thighs and then onto a foot and catch it.

Level 4 - Bounce the ball onto both thighs and then both feet and catch it.

Try this each day and watch how much easier it becomes!

### Daily fitness exercises

Day 1 - 5 Press ups / 10 start jumps / 5 sit ups

Day 2 - 8 Press ups / 10 star jumps / 8 sit ups

Day 3 - 8 Press ups / 15 star jumps / 8 sit ups

Day 4 - 10 Press ups / 15 start jumps / 10 sit ups

### Mr Cummings Dance Challenge

Can you make your own dance. Once you have completed it can you film it, then watch it back. After watching your own dance, what would you change to make it even harder or even better?

## R.E.

A pilgrimage is a journey, often into an unknown or foreign place, where a person goes in search of new or expanded meaning about their self, others, nature, or a higher good, through the experience. It can lead to a personal transformation, after which the pilgrim returns to their daily life. I Want you to imagine you are about to go on a pilgrimage to change yourself...

Your task is to plan a pilgrimage to a special place related to Christianity. Use the Internet and the planning sheet below to help you complete your plan! Remember to use estimates if you cannot find exact amounts.

Name of special place:

Distance from home:

Travel method:

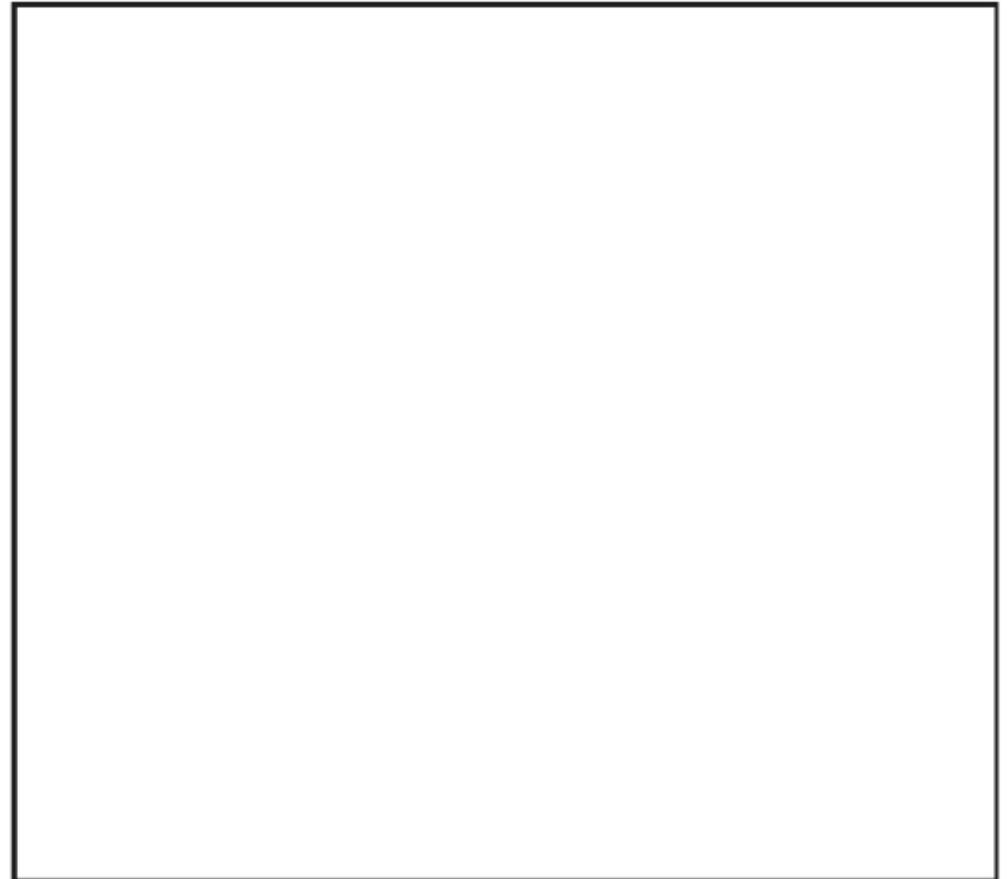
Estimated cost of travel:

Estimated time taken to travel:

Place to stay:

Total time away from home:

Picture, map or diagram of the journey:



## Topic

Keeping with the idea that Liverpool is a great city to live in, I hope you all found out some fantastic facts during your research tasks.

This week, we are going to look at the human and physical features of Liverpool.

Human features of a place are things that would not exist without humans. For example, our school would not have been built if humans did not build it.

Physical features of a place are not man made and are natural. For example, rivers and mountains.

Below is a table with a list of different things in Liverpool and I want you to decide whether they are physical or human features. Place a tick in the column you think it is. The first one has been done for you.

Feature of Liverpool	Physical?	Human?
Anfield Football ground		✓
Goodison Park Football ground		
Sefton Park		

River Mersey		
St Margaret's C of E Primary School		
Liverpool 1 shopping centre		
Liverpool Cathedral(s)		
Stanley Park		

The last few rows have been left blank for your own ideas.