KIRTON PRIMARY SCHOOL

TERM 6 NEWSLETTER 2025

YEAR 4

June 2025

Dear Parents and Carers

We would like to welcome you to the start of our final term.

Our Topic

Term 6: Earthquakes and Volcanoes.

Children will learn about what causes earthquakes and volcanoes and the effects they can have. In this unit, children will explore the dynamism of the earth, learning about its structure, look particularly at the causes and distribution of earthquakes and volcanoes and their effects on landscape and people. They will be introduced to the 'Pacific Ring of Fire', the most active region on earth, and consider why people choose to live on the flanks of volcanoes and in earthquake zones when both can be life-threatening. They will learn that volcanoes have existed throughout geological time and that there are several different types. In the Big Finish, the children will make their own erupting volcano!

In our science lessons, children will learn about the different plants and trees and how to classify them. In this project, children will be going outside and classifying plants in the local area. This module also builds on work in Year 3 around the functions of different parts of flowering plants, their requirements for life and their life cycle. When working scientifically, children will make careful observations of leaves, bark, buds, tree shape and flowers. They will use these observations to classify the plants and will record this information using keys.

Maths and English

In maths lessons, children will be learning about: the four basic operations, real life and word problems, time, bar charts and co-ordinates. In order to support your child, you could talk to your child about the maths they are learning, time them to do a specific task, repeat it and calculate how much quicker or slower they were the second time, look at bar charts that convey different information and play Battleships (see attached resources).

It would really support your child if they were confident with their times tables. This would help them in all areas of maths. This term your child needs to learn up to the 12x table.

x2 x10 x5 x4 x3 x8 x6 x9 x7 x11 x12 p1

In English, we will be learning about: creating a poem about a sweet that bewitches a character in The Lion, The Witch and The Wardrobe by CS Lewis and writing a conversation between characters in the story. We will be reading myths and legends based in the United Kingdom including stories about the Welsh dragon, Will-o'-the-wisp, the Leprechaun and the Loch Ness Monster.

In order to support your child, you could read The Lion, The Witch and The Wardrobe by CS Lewis with your child and discuss the land of Narnia, the different characters and the sacrifice made by Aslan. You could also use the internet to find out about various mythical creatures from the UK mentioned above.

The spellings that your child will be learning this term can be accessed through our school website; it would be really useful if you could help your child to learn these spellings.

Please encourage your child to read at home every day and ask them questions about what they are reading at every opportunity. We aim to change books regularly. Your child should bring a water bottle to school. Please ensure the bottle is clearly named and **only contains water**.

PE

Please ensure that your child has the appropriate PE kit in school every day. For outdoor games, the children need

plain black/navy tracksuit bottoms, a plain white t-shirt, a plain sweatshirt and trainers. For indoor PE, the children need plain black/navy shorts and a plain white t-shirt. Every item needs to be clearly labelled and in a bag that will remain in school every day. Kits will be taken home to be washed at the end of each term. No items should be taken home during the term. Children who attend sporting clubs should bring extra kit so their PE kit can stay in school.

Homework

Homework is set on a Thursday and will continue to support your child's education. It will include weekly maths and English activities as well as reading, some spelling investigations and multiplication facts. If there are ever any problems about the homework, please come and see us as soon as possible.

Warmer weather

As the weather is getting warmer, children should begin to bring hats into school. Please ensure these are clearly named. Sun cream must not be brought into school as it cannot be applied at school. If necessary, sun cream should be applied at home before coming to school.

Important Dates

02.06.25 – First day of Term 6
W/C 09.06.25 – Y4 Multiplication Tables
23.06.25 – Y4 trip to Boston Stump
24.06.25 – Y3 and Y4 Sports Day
14.07.25 – Reports to be sent home this week
18.07.25 – Summer Gala 3:30 – 5:00pm
22.07.25 – Last day of Term 6
02.09.25 – First day of Term 1

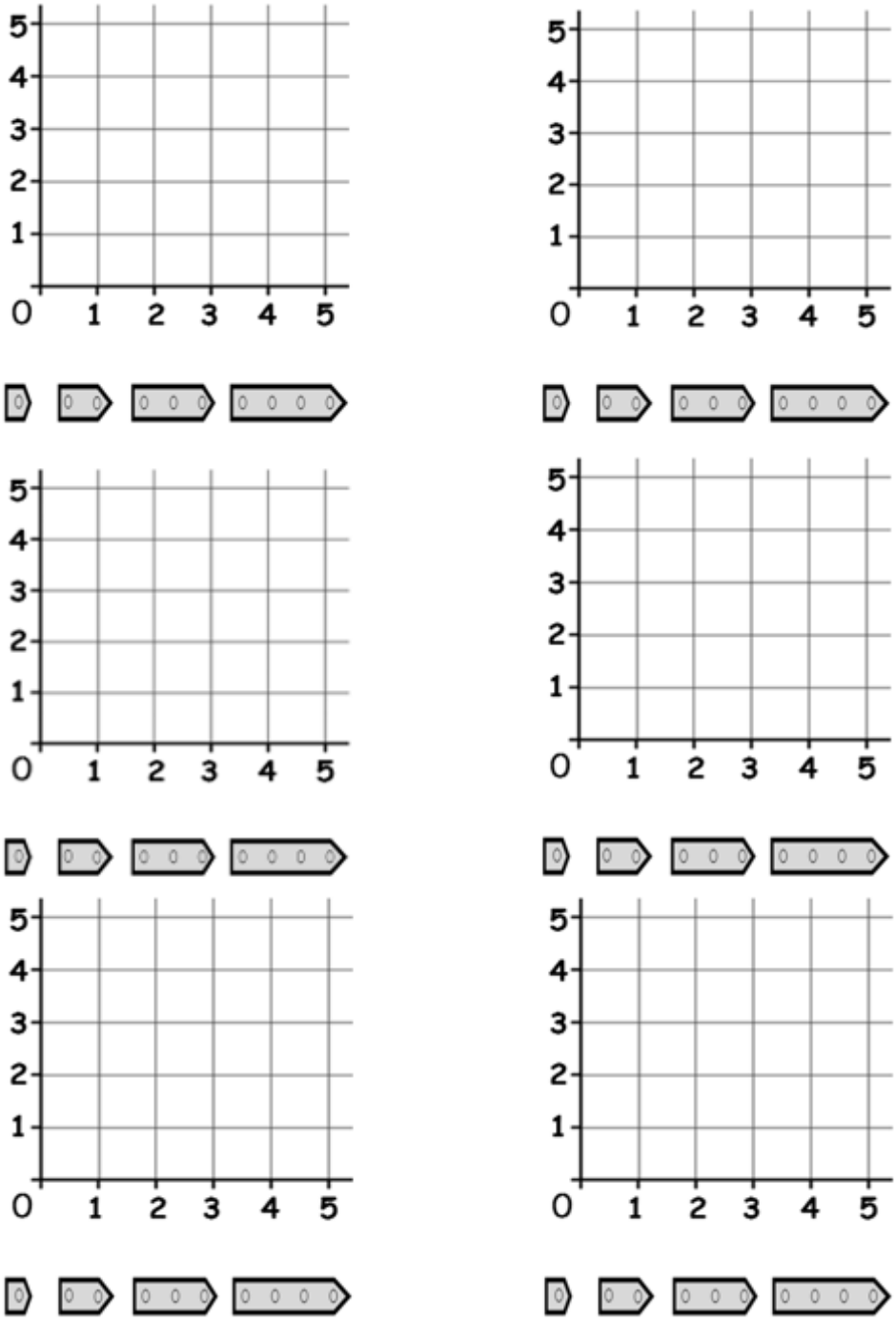
Yours Sincerely

Mr Batterham Ms Philips Mr Saw
Year 4 Class Teachers

HOW YOU CAN SUPPORT YOUR CHILD'S LEARNING THIS TERM:

Key things that parents can do to support their child this term related to things they will be learning about are:

- *playing Battleships with your child to help them learn about co-ordinates – instructions and sheet attached*
- *making your own volcano at home – instructions attached. Pictures or videos of this would be worth MANY House Points!*
- *making your own seismograph at home – instructions attached. Pictures or videos of this would be worth MANY House Points!*



Each player should draw their four Battleships onto the grid.
During play, the players take turns in taking a shot at the opponent by calling out the coordinates. The opponent responds with "hit" if it hits a ship or "miss" if it misses. If the player has hit the last remaining part of a ship, the opponent must say, "You sank my battleship!"
During play, each player should record their opponent's shots on the left-hand grid and their shots on the right-hand grid as "X" for a hit and "O" for a miss. The first player to lose all their ships loses the game.

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How to make a volcano

Volcanic eruptions are one of the most powerful natural forces on our planet.

Making your own miniature erupting volcano is a great, safe way to start learning about these incredible geological features.

Read on for written instructions and to discover more about volcanoes.

How to make an erupting volcano model

For the volcano model:

- Two A3 sheets of card
- 200 ml plastic bottle
- Pencil
- Scissors
- Tape
- Paint and paintbrushes

For the eruption:

- Small bowl
- Cup
- 1 tbsp bicarbonate of soda (baking soda)
- 1 tbsp washing up liquid
- 2 tbsp water
- ½ cup vinegar
- 1 tbsp red food colouring

Method

1. Place your bottle upside down in the centre of a sheet of card and draw a small circle around the neck.

2. Cut a straight line through the card to the middle of the circle and cut it out. In the middle of the card, draw around the bottleneck and cut out the circle.

3. Overlap the two sides of the card to make a cone shape. Tape this into place, leaving a hole where you cut out the circle.
Cut around the base of the cone so that it sits flat, but make sure that it is still taller than your bottle.

4. Place the cone over the bottle. Tape the top of the paper cone to the neck of the bottle to hold it in place. Tape the base of the cone to the other sheet of card.

5. Use paint to decorate the cone and make it look like a volcano. Allow your model to fully dry. Cut away the card at the base of the cone so that it sits flat.

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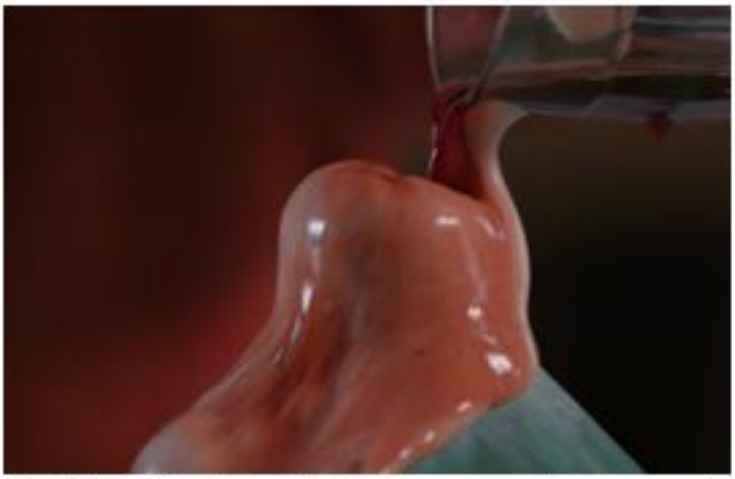
6. In a bowl, combine the bicarbonate of soda and washing up liquid. Add the water and mix thoroughly. Pour this mixture into your volcano.

7. In a cup, mix together the vinegar and food colouring.

8. When you're ready, pour the vinegar into the bottle with the bicarbonate. Wait for it to erupt and watch how the lava flows.

9. Experiment with different amounts of bicarbonate and vinegar and see how the volcano's eruption changes.



10. Stand back and watch your volcano erupt!

Safety Advice

Take care when handling the eruption ingredients and stand back when watching the eruption to make sure you don't get any in your eyes. Make sure you are working in a well-ventilated area.

To make cleaning up easier, it's best to stand your model on a wipe-clean surface or do the entire project outside!

How to Make Your Own Seismograph

Introduction

Scientists study earthquakes so we can understand them better and hopefully one day predict them so we can save thousands of lives. A seismograph is a tool scientists use to record earthquakes and measure their strength. In this activity you will build your own seismograph using simple materials.

Materials

- Medium-sized cardboard box
- Paper or plastic cup
- String
- Marker
- Scissors
- Paper, or a very long printed receipt from a store
- Tape
- Coins, marbles, small rocks, or other small, heavy objects to use as weights
- Another person to help

Instructions

1. Cut the lid or flaps off the cardboard box. Stand the box up on one of the smaller sides.
2. Poke two holes opposite each other near the rim of the cup.
3. Tie a piece of string, slightly longer than the length of the box, to each hole.
4. Poke two holes in the top of the box, making sure they are the same distance apart as the holes in the cup.

5. Push the two pieces of string through the holes and tie them together on the top of the box so the cup hangs down inside the box. The bottom of the cup should be about an inch above the bottom of the box.

6. Poke a hole in the centre of the bottom of the cup. Remove the cap from the marker and push the marker through the hole so its tip just barely touches the bottom of the box.
7. Fill the cup with coins or other small weights, making sure the marker stays vertical.

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8. Fold a piece of paper in half lengthwise then fold it in half lengthwise again. Unfold the paper and cut along the folds to form four equal-sized strips. Tape the strips of paper together end to end to form one long strip. If you have a long-printed receipt, you can skip this step.
9. Cut two slits on opposite sides of the cardboard box as close as possible to the bottom edge. The slits should be wide enough to pass the paper strip through one side, across the middle of the box and out the other side.
10. Make sure the marker is centred on the paper strip. You might need to poke different holes in the top of the box and re-hang the cup if necessary.

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11. Now you are finally ready to use your seismograph! Stabilize the box with your hands as your helper slowly starts to pull the paper strip through the box from one side to the other side.
12. Now, shake the box back and forth (perpendicular to the paper strip, keeping the bottom of the box in contact with the table) as your helper continues to pull the paper strip through, doing their best to pull at a constant speed. How does the line on the paper strip change?
13. Pause your shaking for a few seconds (as your helper continues to pull the paper) then try shaking the box harder.
14. Pause for a few more seconds then shake the box very gently.
15. Pull the paper strip all the way out of the box and look at the line.

Can you tell how hard the box was shaking based on the line? Can you tell when the box was not shaking at all?

What Happened?

When your helper pulls the paper through the box with no shaking, the marker should just draw a straight line on the paper. When you shake the box, it moves back and forth and the paper moves along with it. Because of the heavy mass of the cup and the way it is suspended by strings, the cup does not move as much. This means that the paper moves back and forth under the (mostly) stationary marker resulting in a squiggly line. The size of these squiggles (their amplitude) corresponds to how hard you shook the box just like how the line drawn by a real seismograph corresponds to the strength of the earthquake. Read the Digging Deeper section to learn more about seismographs.

Digging Deeper

Earthquakes happen all the time but most of them are so small that we can't feel them and they do not cause any damage. However, large earthquakes can be quite catastrophic—destroying buildings and causing significant damage to property and loss of life. An earthquake's strength is measured on the Richter scale. The Richter scale goes from 1 to 10. Each increase of 1 on the Richter scale means the earthquake is actually 10 times more powerful (e.g. a 2.0 earthquake is 10 times stronger than a 1.0 earthquake - not twice as strong). As of 2019, the strongest earthquake ever recorded measured 9.5 on the Richter scale.

A seismograph is a machine used to measure the motion of the ground during an earthquake. Seismographs are very sensitive and can detect earthquakes that occurred very far away (along with other things that make the ground shake like volcanic eruptions or large explosions) that might be too faint for humans to feel. Seismographs are made by hanging a heavy weight from a rigid frame connected to the ground. When the ground moves during an earthquake, the frame moves back and forth along with the ground. However, the heavy weight is not connected directly to the ground, and it wants to stay in place. The result is that the weight holds still, while the frame moves back and forth around it. The relative motion of the weight and frame can be turned into a recording called a seismogram. The seismogram can be analysed later to find out when an earthquake happened and how strong it was. While modern seismographs record this motion as an electrical signal, older seismographs would use a pen to draw the signal directly on paper. In this activity, you built your own old-fashioned seismograph that used a marker to record an "earthquake" on a paper strip.