#### DT: To create an Archimedes Screw

- 1. Name 3 devices used for moving water. shaduf, water wheel, Archimedes screw
- 2. Who was Archimedes? Greek mathematician, astronomer, engineer and inventor
- **3.** How is the Archimedes Screw used to move water? Using a helical surface surrounding a central cylindrical shaft; water is scooped up and rotated around a helicoid raising from lower to higher level
- **4.** Where can his screw mechanism be found in other devices? In grain augers (elevators), sewage treatment plants, in a snow blower
- 5. Name 2 ways in which we could test our models of Archimedes' screw. By exploring the number of rotations to move water; how the angle of elevation affects the performance

## **Art: Contemporary Fen paintings (landscapes)**

- 1. What is a landscape painting? Landscape painting, also known as landscape art, is the depiction of natural scenery such as mountains, valleys, trees, rivers, and forests, especially where the main subject is a wide view
- 2. Which 3 layers are landscape paintings created with? Background, middle ground, fore ground
- 3. What is meant by the term 'highlight'? A lighter/ more illuminated area
- 4. What is meant by the term 'shadow'? A darker/less illuminated area
- 5. In which part of the painting would you expect to see more texture? In the foreground

## Dance (Straw Bear)

- **1.** What is mirroring? When the moves are completed opposite to the other person (different arm/ leg etc.)
- 2. What is the main step in a molly dance called? The step-hop
- 3. What does unison mean? Doing dance moves at the same time
- 4. Where does the 'Mucky Porter' dance originate from? East Anglia
- **5. What does canon mean?** To take it in turns to perform a movement that is identically copied and performed by others

#### **Netball:**

- 1. What is a chest pass? The ball should be held in front of the chest with elbows tucked in. Step in the direction of the pass. Push the ball from the chest with both arms. Your palms and thumbs make a 'W' shape.
- 2. Name 3 types of dodge. the drive, the dodge, the double dodge
- 3. Name 2 types of pivot. pivot, stride stop, jump stop
- 4. Name 3 types of pass. chest, bounce, shoulder
- 5. When the ball is in the air what two things should you do with your body? Watch ball, bend knees, be on balls of feet. Show me the body position when turning.

# **Park Lane Primary School**

## **Autumn Term 2 2023**

(November – December) Year 5



"Creating aspiration and enabling achievement"



Mrs German, Miss Jones, Mrs Ingham, Mrs Dance, Mrs Herring

## Dear Parent/Carer,

We hope that you have had an enjoyable October half term break. This letter is to inform you of what your child will be learning this half term through a range of questions that they should be able to answer by Christmas. We have provided the answers for you as well.

#### **Mathematics**

- 1. What are the first five multiples of 8? 8, 16, 24, 32, 40
- 2. Explain how to find the common factors of 9 and 15.

Find the factors of 9: 1, 3, 9

Find the factors of 15: 1, 3, 5, 15

Therefore, the **common** factors of 9 and 15 are: 1 and 3

- **3.** What happens when we multiply a number by 10? The digits move one place value to the left and a zero is a place value holder in the ones column.
- 4. How many times is a square number multiplied by itself? Two
- 5. What is 3<sup>2</sup>? 9

#### English: Fiction/Non-Fiction (informal letter writing)

- 1. What is a relative clause? A type of subordinate clause that gives more information about a noun.
- **2. What does a relative clause always start with?** A relative pronoun, for example, who, which, that, where
- 3. What are modal verbs? Types of verbs that express obligation, certainty or ability
- **4.** What does the word 'informal' mean when we're writing? It is a more relaxed style of writing, where we can be more personable with who we are writing to.
- **5.** What are key features of an informal letter? Sender's address, date, appropriate greeting, first person, paragraphs to separate content

## Science: How and why do animals defend a territory (Case study of a robin)

- 1. Name the 4 main parts of a robin's lifecycle. Egg, chick, fledgling, adult
- 2. What does the term 'incubate' mean? To keep the eggs warm until they're ready to hatch
- 3. What is a territory? A region that is marked and defended by an animal.
- **4.** Why do robins defend their territory? Protect their young / mate / nesting site
- **5. Explain the stages of a reptiles' life cycle.** Egg, hatching, juvenile, adult.

## French: En route pour l'ecole (On The Way To School)

- 1. How do we say shop? Le magasin
- 2. How do we say my Mum and my Dad? ma mère (My mum), mon père (my dad)
- 3. How do we say my Sister and my Brother? Ma sœur (my sister), Mon frère (my brother)
- 4. How do we say my friend? Mon ami
- 5. How do we say I travel to school with... Je me rends à l'école avec...

#### R.E: Mary and Joseph – What does the Bible tell us about the parents of Jesus?

- 1. Who was Mary? Mary was chosen by God to be Jesus' human Mother
- 2. What do we know about Joseph's relationship to Jesus? Joseph was not Jesus' real Father; he adopted Joseph and cared for him like his own son
- **3.** What message does the Angel Gabriel give to Mary? That she will carry God's child and that her cousin Elizabeth, who is older in years, will also give birth
- **4.** What does the word 'blessed' mean in the context of Mary? She was given a gift by God, thereby bringing others happiness
- 5. What was the choice that Joseph had to make? To decide whether to divorce Mary quietly (and not publicly shame her) or whether to be obedient to God in becoming Jesus's father on Earth

#### **PSHE: Keeping Healthy (Smoking)**

- 1. What are the risks associated with smoking? Causes serious illness and disease, social risks, emotional risks, affects mental wellbeing
- 2. What are some of the reasons people start smoking? Peer pressure, to look cool, to rebel, see other people (both family and famous people) smoking, unaware of long-term risks
- 3. What are some of the ingredients you will put into your body if you smoke? Tobacco, which contains chemical called nicotine (addictive), arsenic (found in rat poison), butane (a gas used in explosives), cyanide (deadly poison)
- **4. What is vaping?** Vaping is where someone inhales nicotine in a vapour rather than smoke using an e-cigarette. They do not burn tobacco and do not produce tar or carbon monoxide, two of the most damaging elements in tobacco smoke.
- **5. Is vaping better for people than smoking?** It's not completely risk free, but they carry a small fraction of the risk of cigarettes.

## Geography: The major beaches and cliff systems of the UK

- 1. What is the difference between a coastal cliff and a coastal beach? Coastal cliff a steep rock face at the edge of the sea; coastal beach a narrow strip of land (sand, pebbles or stone) separating a body of water from inland areas
- 2. How is deposition caused? By longshore drift
- **3.** What is longshore drift? The process by which sediment is moved along the coastline
- **4.** What do we mean by the term 'erosion'? Process by which materials are worn away by natural forces such as wind or water
- 5. What is formed when erosion occurs? Cracks which turn into caves. Additionally, near a headland, arches are formed which when eroded, turn into stacks and stumps.