

KS1 Project Pack Ice Cream Pop-Up Shop

During this project, pupils will:

- develop their creative thinking skills;
- use their senses to explore and investigate;
- make decisions and choices;
- work together;
- apply their money and calculation skills in a practical context;
- feel proud of their achievements;
- have fun!

Teaching Sequence

1. Guess the Flavour

You will need:

blindfold, a variety of flavours of ice cream, Ice Cream Taste Testing Sheet

Science – Senses

- Introduce the project to the children: **We are going to open our own pop-up ice cream shop! Are we ice cream experts? Let's find out!**
- Taste test - Science - Recap/introduce the sense of taste using this PowerPoint: **t-t-24613-new-science-senses-5-tastes-powerpoint**
- Explain to the children that we will be testing some different ice cream flavours, blindfolded! **Can we guess the flavour? What other senses can we use?** Explain that we will use our sense of taste, but our sense of smell might also help.
- Use the **Ice Cream Taste Testing Sheet** to record the children's predictions and test results. Discuss as a class: **What did we notice? What were our favourite flavours?**

2. Favourite Flavours

You will need: Ice Cream Flavour Cards, whiteboard/large piece of paper, Ice Cream Flavour Pictogram Activity Sheet, Tally Chart Template

Maths – Data handling

- Watch this **video clip**.
- Explain to the children that we are going to create a class pictogram.
- Provide children with the **Ice Cream Flavour Cards**. Ask children to choose the card that represents their favourite flavour.
- Collect the children's cards. This is our data. **Is it easy to tell which is our favourite ice cream?** Discuss the children's ideas. **How could we make it easier to find out which is our favourite flavour? How can we organise the information in a different way?**

	• Introduce the concept of a pictogram. On the whiteboard, or a large piece of paper, write the title, 'What is your favourite flavour of ice cream?' • Children should then add their favourite flavour to the pictogram. • As an extension, children could then create their own version of the pictogram, using the Ice Cream Flavour Pictogram Activity Sheet. • As a further challenge activity, children could record their information on this Tally Chart Template.
3. Super Scooper Maths You will need: coloured plastic balls (cotton wool balls or scrunched up paper can be used as an alternative), whiteboards or paper, Ice Cream Cone Template, Super Scooper Ice Cream Maths Challenge Activity Sheet, coloured pencils	Maths – Probability • Show children three colours of plastic balls. Discuss which flavours the different colours represent. Painted cotton wool balls or scrunched up paper could be used as an alternative if you do not have access to plastic balls. • Challenge children with the question: How many different ice creams can you make? Using this Ice Cream Cone Template, demonstrate creating different ice cream flavour combinations. Agree the rules of the investigation with the children: Are we allowed to use two or three of the same flavour? Would, for example, 'strawberry + vanilla + chocolate' and 'chocolate + vanilla + strawberry' count as two different combinations? • Using the Super Scooper Ice Cream Maths Challenge, children investigate their own combinations of ice cream flavours. Children can be supported by working practically with the plastic balls/cotton wool balls. • Once children have had the opportunity to explore independently, bring them back together to share findings. How many possible combinations were there with two/three/four scoops? How do we know?
4. Colourful Cones You will need: Colour Wheel, paper, coloured paint, black paint, white paint, paintbrushes	Art and Design – Colour mixing • Show children this Colour Wheel. What colours can you see? Explain that the colours on opposite sides of the wheel will 'pop' (look even brighter) when they are next to each other. You can also add white to the colours to create different tints of colour. You can add black to the colours to create different shades of colour. Explain that: We are going to be using the colours from the colour wheel to create our own colourful ice cream paintings. We can use these to decorate our pop-up shop. • Demonstrate drawing a simple ice cream cone (triangle) with four circular scoops of ice cream on the top. • Once children have drawn their ice cream cone outlines, demonstrate creating a colour tint. Begin with a single colour and use this to paint the bottom scoop of ice cream. Add some white to your colour and paint the second scoop in this lighter colour. Continue with this until all of the scoops are painted in different tints of the same colour, gradually getting lighter as more white is added.

	• Once the children have painted their ice creams, demonstrate how to create another shade of the original colour, by adding black instead of white. Paint the cone in the new shade you have created. • Once dry, children should choose a contrasting colour from the opposite side of the colour wheel to paint the background of the painting, allowing the colours to 'pop'. • Lay the paintings out on the tables and ask children to walk around them. Ask the children to stop after a short time and look at the painting nearest to them. What do you notice? What do you like?
5. Where should we put our pop up shop? You will need: Ice Melting Investigation Sheet, water, ice cubes, milk or cream, stopwatches, plastic sandwich bags, fridge, hairdryer	Science – Investigative skills • Explain to the children that we need to decide where the best place will be for our pop-up shop. What would help to stop the ice cream from melting? How can we keep it cool? • Show children some water and some ice. How is water made into ice? Share ideas. Ensure that children understand that water has to be made extremely cold to become ice, usually in a freezer. Show the children some milk or cream. How do you think milk/cream is made into ice cream? Ensure that children understand that, once sugar has been added, milk and cream has to be made very cold to become ice cream. • Give the children an ice cube to hold. Place some other ice cubes in a bowl. What is happening to the ice cube? Children will notice that the ice is melting quickly. Why do you think this is happening? What is happening to the ice in the bowl? Is it different? Why? Ensure that children understand the vocabulary 'melt' and that heat makes it happen more quickly. • Challenge the children to think about the places where the ice cubes would not melt or may melt more slowly/quickly. • Organise the children into small groups. Place the ice cubes in plastic sandwich bags. • Each group should choose somewhere to place their ice cubes, a combination of indoors or outdoors if possible. Place one ice cube in the fridge/freezer and allow another group to use a warm hairdryer for their ice cube. This investigation will be most effective on a sunny day, where there are variations in temperature between shaded and sunny spots. • Provide each group with a stopwatch. Use the Ice Melting Investigation Sheet for pupils to record their findings at 1 minute, 3 minutes and 5 minutes. Gather the children together and share findings so that children can complete their activity sheets. Where should we position our pop-up shop?

6. The Biggest Ice Cream in the World! You will need: Ice Cream Rhyme, The Biggest Ice Cream in the World Writing Frame, Ice Cream Page Borders, paper, pens	English – Poetry • Read this Ice Cream Rhyme to the children. • Explain to the children that we are going to create our own poem about the biggest ice cream in the world! Show the children The Biggest Ice Cream in the World Writing Frame. • Can children remember the different ice cream flavours we have tried? List them as a class. Ask children to choose their favourite flavour and add an adjective, e.g. delicious chocolate, sweet strawberry. Add the children's ideas to a class poem. Read the poem as a class. Did we make the Biggest Ice Cream in the World? • Children could write their own poems using these lovely Ice Cream Page Borders.
7. The Clean Team! You will need: moisturising lotion, different colours of glitter	Science – Hygiene • Explain to the children that in order to get our five star hygiene rating, we will need to have very clean hands for handling the food. Why is this important? Ensure that children understand that it is important not to transfer any germs onto the ice creams we are making, as that could make our customers unwell. This is called good food hygiene. Shops that sell food get a star rating to say how good their food hygiene is. We are aiming for the full five stars! • How can we make sure that our hands are clean? We will wash them. Ask the children to show if they think they are good at washing their hands. Do you have clean hands? Select children to act out how they wash their hands, in front of the class. Do you think they have a good technique? What did you see that was good? • Organise children into pairs. Ask each child to rub a small amount of lotion onto their hands (use something suitable for sensitive skin and check for allergies first). • Sprinkle some glitter into each child's palm, giving each pair a different colour of glitter. Explain that the glitter represents the microscopic germs that we all carry on our skin all the time. We can't see the germs without a microscope but they are always there. Most of the germs are harmless but some can make us very ill. • Children should experiment with opening and closing their hands, placing their hands together, touching the table top, door handles and picking up small items. What do they notice? • Ask children to shake hands with their partner and look closely at their hands to see what they observe. Notice how germs are transferred from person-to-person when we touch each other.

	• Ask the children what would happen if they were to eat their lunch now, before washing their hands. Explain that eating without washing your hands first, causes germs to transfer from hands to our food and mouth. • Children should attempt to remove the glitter from their hands by rubbing them on a paper towel, rinsing their hands under cold running water and finally with soap and warm water. What do they notice? What washed the glitter away the most? • Demonstrate good hand washing skills, between fingers, for an appropriate length of time (duration of the alphabet song). Revisit learning from the beginning of the lesson – Do children still think they have been washing their hands well? What have they learnt about hygiene? • Children could take a copy of this Hand Washing Record Chart home to compete, consolidating the concept.
8. Freeze Me! Making Our Own Ice Pops You will need: ice pops, a variety of cordials or juices, plastic food bags, elastic bands, sticky labels, access to a freezer	Science and DT • Provide children with an ice pop each. What is it? What do they notice? What is it made from? Recap learning from session 5. • Explain that today we will be making some ice pops to sell in our shop. Children should taste the cordials/juices on offer and decide which to add to their ice pop. • Children add cordial to a small bag of water. Help children to tie a knot in the top of their ice pop. Children may then use elastic bands to create and secure different shapes in their plastic bag. • Discuss – What can we call our ice pops? Look at examples from different brands. Can we choose an adjective to describe the ice? Make a shared list of possible adjectives and nouns for the ice pop. • Children should create a sticky label for their ice pop and add it to the bag. Blank labels could be used and glued to the bag.
9. Setting up the Shop You will need: paper, pens, card, paint, large piece of card or paper roll	PSHCE and Maths • What do we need for our shop? Children should discuss in talking partners and contribute to a class list. Support the children in listing things needed, e.g. posters, table cloth, price list. • What shall we call our shop? Children should discuss in talking partners and then think, pair, share ideas. • How will the other children know about our shop? Posters and a letter home asking older children to bring in a small amount of money to purchase an ice cream. In an infant school, parents and carers could become the customers, in which case the letter should be addressed to them.

You may need to purchase ice cream/ cones/ toppings in advance of the next session. Costs could be reimbursed through the sale of ice creams.	• Allocate tasks to groups of children, dependent on skills and adult support available: • Posters/adverts • Price list – How much does ice cream cost? How much for one ice cream? Which toppings should we use? Which are good value for money? How much for one ice pop? • Tablecloths – These could be made by decorating large pieces of paper or fabric with felt pens/fabric pens. • Select a group of children to write a letter to be sent home to older children, clarifying a small amount of money to bring, day, time and location of the ice cream shop. A playtime session may fit in well with the school day. If parents and carers are to be the customers, the shop could be run after school.
10. Our Pop-Up Shop You will need: resources produced in session 9, ice pops from session 8, ice cream order forms (optional), ice cream, cones, bowls or paper cups, toppings	• Set up the shop with the children. This could either be done ‘cafe style’ with an order form, or ‘counter style’ with children being served at the counter, dependent upon time and resources. Where is the best location for our shop? Remind children of learning from session 5. You may wish to print some Ice Cream Order Forms. • Allocate roles, e.g. taking money, making ice creams, tidying up. Some children could take ice creams round to sell to customers on the playground. You may wish to allocate the role of ‘team photographer’ to some of the children, providing photographs for a review/celebration of the activity. • Children should wash hands in preparation for running the shop. Remind children of learning from session 7. • Tidy away from the shop, emphasising the importance of good team working skills. • Review and celebrate successes of the activity with the children. What was your favourite thing about running an ice cream shop? What was easy? What was hard? What skills did you need? • Count the money as a class or allocate this task to specific children – What was our total? Did we make enough money to pay for the ice cream? How much was left over? What shall we spend it on? You may wish to spend any additional money on a new piece of equipment for your class, or treat your children to their own ice cream/ice pop to celebrate their learning!