

GET STARTED

Give children this incredible fact: 'About 8 million disposable nappies are thrown away each day in the UK.' Now engage children in using maths skills to do a 'big number' calculation to work out how many in one week, month and year. Do they think this is a good thing? What is their reaction? Does this mean that there are more nappies thrown away each year than there are people living in the UK? Ask children to find out.

LET'S THINK LIKE SCIENTISTS

Use these questions to develop research skills and speaking and listening:

- How many nappies do parents use in one day?
- Which brand do they buy? Why?
- What happens to disposable nappies?
- How long do they take to decay?
- Why is bamboo used for nappies?

ACTIVITIES

1 NAPPY SURVEY

L.O. Ask relevant questions and use different types of scientific enquiries to answer them.

Gather, record, classify and present data in a variety of ways to help in answering questions.

Use straightforward scientific evidence to answer questions or to support their findings.

- In the previous unit of this topic children asked questions about nappies and decided the best way to answer them. Some of the questions children asked might have been placed under pattern seeking, as part of a whole-class survey on nappies. For example, children might have asked about 'Which nappy is used the most?', 'Do mums use the same nappy all of the time?', 'Do mums buy the same nappy all of the time?'
- Return to these questions and explain to children that they are going to make and carry out a survey to find out more about nappies and that this means asking parents and carers questions. Ask each group to think about and decide on three questions that they would like answered. You could set up a simple survey sheet, e.g. yes / no answers or numbers and each group could type in their questions which, once printed out, could be given to children to take home.
- To collate answers, each group could be given certain questions and a tally sheet to collect data information; alternatively, if children are able, an Excel spreadsheet could be used.
- Finally, children could use the results to answer questions, e.g. 'Which is the most popular brand of nappy?'

ASSESSMENT

Working Scientifically

- Em. Children could carry out a simplified survey asking adults in the school and using a tally chart to record data.
- Exp. Children collect and use data to answer the original question.
- Exc. Children can use the data to answer questions and also link data from different questions, e.g. the favourite brand is only used at night time.

2 SHOULD DISPOSABLE NAPPIES BE BANNED?

L.O. Ask relevant questions and use different types of scientific enquiries to answer them.

Use straightforward scientific evidence to answer questions or to support their findings.

- Show children PowerPoint Slide 9 and, working in pairs or small groups, children work out the 'Big sums' on the slide; they could use calculators. The aim is to help children understand how many nappies one baby uses over the different timescales then, if this is multiplied by how many new babies have been born to parents of children in the school (a survey could get this information), the numbers become even more staggering. It might help children to have some understanding of how many nappies go into landfill. You might need to go over how to carry out calculations, reminding and supporting children in applying maths skills.
- Consider asking a local supermarket to donate some nappies so that children can see what 10, 20, 30 nappies look like when piled up; they might find it hard to visualise.
- Give children the information cards in Activity Resource 6.2. The statements are for and against the use of disposable nappies and should be cut out so that children can sort them into 'For' and 'Against'. You could use PowerPoint Slide 10 as a focal point for discussion.
- Show children PowerPoint Slide 11. Some children could research bamboo nappies and find out if they are environmentally friendly.
- Children could research what happens to nappies once they have been used; prompt children's thinking by showing PowerPoint Slide 12. This activity is best carried out as a paired or group activity so that children engage in discussion about where to place each card and why.
- Children could also research the use of towelling, bamboo and reusable nappies and compare these to disposable. Finally, the class could vote using tokens on which type of nappy they think might be best for parents or for the environment.

YOU WILL NEED

- PowerPoint Slides 9 to 12
- Activity Resource 6.2

ASSESSMENT

Working Scientifically

- Em. Children require support and choose between, e.g. two statements.
- Exp. Children discuss the information and are able to explain their choices.
- Exc. Children discuss the information and may decide that some could be placed under both headings: they may also think of some arguments for and against themselves.

3 DESIGN AND MAKE YOUR OWN NAPPY

L.O. Use straightforward scientific evidence to answer questions or to support findings.

- One way to assess children's understanding is to provide a context in which they can apply the knowledge and skills they have been developing. This final activity uses children's experiences of a wide range of nappy products and their properties as well as how to carry out tests, which means that children will have knowledge and skills to apply in designing their own nappy. Children could work in pairs and, through discussion, create annotated diagrams to show what the nappy will look like and the materials they will use and why. Give children a range of materials to choose from and challenge children to use their knowledge of materials and their properties when they design their nappies. Before making their nappy, give children time to 'swap' their design with another pair, so that they can give and receive feedback from their classmates. Can they make it environmentally friendly?
- Children make and test their nappy and evaluate it against their original design. Children could record their work through, e.g. their design diagrams and annotated photographs of their tests, and finally design and create an advertisement for their nappy.
- Finally, show PowerPoint Slide 13 as an example of how to develop a concept map about disposable nappies so that children can reflect on what they have learned and use the map to record their ideas and understanding.

YOU WILL NEED

- Materials to make a nappy, e.g. tissue paper, cardboard, textiles, Velcro
- Camera
- PowerPoint Slide 13

ASSESSMENT

Working Scientifically

- Em. Children make a nappy using some knowledge of properties, e.g. soft and they use photographs as part of their advertisement.
- Exp. Children use their knowledge of materials and nappies to design, test and evaluate their nappy and communicate the properties of the materials in their advertisement.
- Exc. Children apply their understanding of materials and their environmental impact, and are able to explain and justify the reasons for using each component using arguments in their advertisement.