



## Enquiry maps

### Age 5 – 7 years

This enquiry map aims to give you some ideas for scientific enquiry based on Explorify activities. You will often find more guidance in the **Take it further** section of the activity. **This enquiry map takes account of the requirements of all four UK science curriculums, so do check your own scheme of work/nation’s curriculum when selecting activities.**

We have included activities that can get the children asking questions as all science starts with curiosity and questioning. This may generate questions the children can go on to investigate. The Great Science Share has different [question maker resources](#) to support this.

	Ask simple questions	Observe changes over time	Identify and classify	Carry out simple tests	Notice patterns and relationships	Use secondary sources to find answers to questions
Animals	<p><a href="#">Squirrelling away</a> – what “I wonder” questions do children have about squirrels? How can they find out?</p> <p><a href="#">Special delivery</a> - what “I wonder” questions do children have about baby birds? How could they find out?</p>	<p><a href="#">Have you ever cared for a baby animal?</a></p> <p><a href="#">Home for baby birds</a> – get outside and look for signs of life cycles. Can you spot a nest? Frogspawn? Snails' eggs?</p>	<p><a href="#">Hot steppers</a> and <a href="#">To flee or not to flee</a> use to discuss the features of different animals and how you sort them. Give the children pictures of a range of animals, or different toy animals for them to sort.</p> <p><a href="#">HYE fed the birds?</a></p> <p>Give children spotter sheets to</p>	<p><a href="#">Hungry snails</a> – what do snails like to eat? Plan an investigation in your classroom</p>	<p><a href="#">Bird feeders</a> - if you have bird feeders near your classroom, look at which birds visit at what times. Do they all like the same food?</p>	<p><a href="#">Creature comforts</a> and <a href="#">Muddy Meal</a> - research what different birds eat.</p> <p><a href="#">HYE fed the birds?</a> - what should you feed the ducks in the park?</p>

			<p>identify different birds.</p> <p><a href="#">Spotty ladybirds</a></p> <p>Get the children searching for different ladybirds on plants.</p>			
Humans	<p><a href="#">What if humans hibernated?</a> - what question do you have about what humans need to live and survive?</p>		<p><a href="#">What's for dinner?</a></p> <p>Sort foods into different groups.</p> <p><a href="#">HYE helped an elderly relative to do something?</a> – how do you change as you grow up?</p>	<p><a href="#">How clean are your hands?</a> - what is the best way to keep your hands clean?</p>	<p><a href="#">See the light</a> - do we all have the same colour eyes?</p> <p><a href="#">Prints</a> - do you get better at smelling as we get older?</p>	<p><a href="#">Pink and bumpy</a> - Find out what your senses do</p>
Plants	<p><a href="#">Shooting sprouts</a> - what "I wonder" questions do the children have? How can you find the answer?</p> <p><a href="#">Why don't all plants look the same?</a> - what ideas do your class have about this?</p>	<p><a href="#">Shooting sprouts</a></p> <p><a href="#">Spring flowers</a> - how does your plant change over time as it grows?</p>	<p><a href="#">HYE spotted a flower you really liked?</a> <a href="#">Autumn Leaves.</a> <a href="#">Flowers in spring</a></p> <p>Take the children outside with spotter sheets to identify different flowers and trees. Compare flowers and leaves in the classroom. How are they the same or different?</p> <p>How can you sort the leaves that you collected on our walk?</p>	<p><a href="#">Have you ever grown seeds or plants?</a> - what do plants need to grow?</p>	<p><a href="#">Brown shapes, Types of apple</a> - do all apples/fruits have the same number of seeds?</p> <p><a href="#">Lovely leaves</a></p> <p>Which tree has the biggest leaves?</p> <p><a href="#">Do you need big seeds to grow big plants?</a> - investigate whether big seeds germinate faster than smaller seeds?</p> <p>Does it matter which way up you plant your bean seed?</p>	<p><a href="#">Curious crown</a> - what is this flower called? How could you find out if you didn't know?</p> <p><a href="#">Shooting sprouts</a> - what are the different parts of plants called? Use secondary sources find out.</p> <p><a href="#">Seeds of success</a></p> <p>Use the information on the back of the packets to find out how to care for your seeds.</p>

Habitats and biodiversity.	<a href="#">HYE seen lots of birds flying together across the sky?</a> - what "I wonder" question do children have about birds and where they live? <a href="#">Different homes</a> - what "I wonder" questions do children have about these different habitats?	<a href="#">Have you ever watched a small animal in its habitat?</a> What plants and animals live in your school/park habitat? <a href="#">Craggy surface</a> - who lives in this tree?	<a href="#">Living-moving</a> How would you group things to show which are living, dead, or have never been alive? <a href="#">Baby animals</a> - Which offspring belongs to which animal?		<a href="#">HYE found it difficult to spot an animal because of its colour?</a> Children will enjoy investigating camouflage.	<a href="#">Thorny issues</a> - which plants and animals can be found here?
Materials	<a href="#">HYE had a favourite toy that broke?</a> - what "I wonder" questions do children have about materials? <a href="#">What if all your clothes were shiny?</a> <a href="#">What if all the materials were transparent?</a> <a href="#">What if every material was rigid?</a> <a href="#">What if every material was stretchy?</a>	<a href="#">HYE tasted sugar in your cereal?</a> - Observe which materials dissolve in water and which don't.	<a href="#">HYE sorted you clothes in different ways?</a> - can the children sort the objects into the material it is made from? Different properties?	<a href="#">Dressed for the weather</a> - what is the best material to make a waterproof coat? <a href="#">It's in the bag</a> – what material makes the best shopping bag? <a href="#">Fascinating Forks</a> - which fork is best for picking up different types of food? Are forks with two or three prongs better?		<a href="#">Fantastic fabrics</a> – Find out how paper is made by watching this What's Going On and then make your own  <a href="#">Spinning a yarn</a> - find out how wool is made by watching this What's Going On and then spin cotton wool.
Forces	<a href="#">HYE used a magnet?</a> and		<a href="#">Changing shape</a> - which materials	<a href="#">Give it a pull</a> - what force do you need		

	<p><a href="#">Magnets</a> – what “I wonder” questions do children have about magnets?</p> <p><a href="#">Scarf shooter</a> - what “I wonder” questions do children have?</p>		<p>change shape when a force is applied? Can the class sort the objects into ones that can be squashed easily and ones that can't be squashed so easily?</p>	<p>to apply to get different outdoor equipment to move or change direction?</p> <p><a href="#">HYE stretched a hairband or an elastic band too much?</a> - Investigate how far you can stretch different materials</p>		
Electricity and sound	<p><a href="#">HYE tried to turn something on when it wasn't turned on at the plug?</a></p> <p>- Get the children exploring making circuits and brainstorming questions.</p> <p><a href="#">How much electricity do we use?</a> - How can you find out?</p>			<p><a href="#">Make sound louder</a> - what materials and shapes will amplify a sound?</p>	<p><a href="#">Pitch perfect</a> - how do you change the pitch on this musical instrument? What patterns do you notice?</p>	<p><a href="#">Inside out</a> - find out how to stay safe around electricity.</p>
Space	<p><a href="#">Earth</a> - what do you notice happens to our planet in this video? How could you find out more?</p> <p><a href="#">HYE spoken to a friend or relative elsewhere in the world and time was different?</a></p>	<p><a href="#">HYE looked up at the Moon and noticed how it appears to be different shapes at different times?</a> - How does the Moon change shape over the month?</p>				<p><a href="#">Celestial objects</a> - Learn about space using story books.</p>

Seasons	<a href="#">What if winter never ended?</a> <a href="#">Sleepy heads</a> - which animals hibernate?	<a href="#">Seasons, Falling into place, Spring flowers</a> - how do trees and plants change during the year? <a href="#">Wonderful weather</a> - what is the weather like today? How could you record it?	<a href="#">HYE seen trees in winter with lots of leaves on?</a> - identify which trees are evergreen and which are deciduous. <a href="#">Falling into place,</a> - Use a spotter sheet to identify autumn leaves.		<a href="#">HYE gone to bed when it is still light outside?</a> - keep a record during the year and look for patterns. <a href="#">Wonderful weather</a> - is it warmer in summer? When do we get more rain?	<a href="#">Sleepy heads</a> - find out about animals that hibernate in winter.
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### For other ideas visit

The Ogden Trust - [Identifying and classifying, pattern seeking, comparative tests, observing overtime,](#) and [research](#)

The Great Science Share has some great videos looking at the [different working scientifically skills](#). You will need to set up a login, but it is free.

PLAN primary assessment also has [working scientifically matrixes](#).