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| **Session 4: Growing Cress** |
| Science curriculum area **(2P):** | **Plants (2P)**i. observe and describe how seeds and bulbs grow into mature plantsii. find out and describe how plants need water, light and a suitable temperature to grow and stay healthy |
| Working Scientifically (**KS1 WS**) | **Working Scientifically (KS1 WS)** i) asking simple questions and recognising that they can be answered in different waysii) observing closely, using simple equipmentiii) performing simple testsiv) identifying and classifyingv) using their observations and ideas to suggest answers to questionsvi) gathering and recording data to help in answering questions |
| Teaching Objectives | * To recall knowledge about plants’ needs.
* To know what cress seeds need and plant them in contrasting locations.
* To make predictions about cress growth and keep records.
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| Key Vocabulary: warmth, light, water, dry, wet, moist, growth, germination |
| ResourcesHow to Make a Cress Head sheet, My Cress Head record sheets, small container (yoghurt pot or empty egg shell), cotton wool, googly eyes or felt tip pen, cress seeds. | Weblinks<http://www.bbc.co.uk/cbeebies/makes/mr-blooms-nursery-cressheads> - *Cbeebies' Mr Bloom talks about how to make cress grow from tights;* <http://www.healwithfood.org/grow-indoors/garden-cress.php> - *Teacher information about growing cress, including the nutritional value (rich in vitamin C);*<https://www.youtube.com/watch?v=qtECPtJzW7A>- *Time lapse of cress growing.* |
| Before the session: Get the materials ready in advance of the session. Ask parents to bring in pots, etc. Whole class: Ask the chn to brainstorm all that they know about how to grow healthy seeds. Write these on the board. Remind them of the beans they are growing in the bags and look carefully at the growth so far. Are there any beans that are thriving more than others? Can the chn work out why? Maybe more sunlight or warmth? Maybe some beans have been allowed to get a little too dry? Explain to the chn that they will be growing their own cress and will be planting it today to eat it in two weeks. With a talk partner can they predict what will happen to the cress seeds? Questions they should think about are: how long will it take for the seeds to start to grow? How long until the cress is full-grown? How big do they think the cress will be when it is fully-grown? Give them a couple of minutes to come up with their answers and then collect together their ideas and predictions. Value all of their responses. Then show the chn this [time lapse clip of cress growing](https://www.youtube.com/watch?v=qtECPtJzW7A). Were their predictions correct? Give themselves a pat on the back for their ideas. Explain that they won't be able to see their cress grow, but that it does grow quite quickly, so it is worth looking for changes every morning and after the weekend. Show them the materials and the resource sheet.  |
| Activities: You may want to make a cress head yourself and have them watch what you do, before they set off. Support the less able by asking an adult to work alongside them. Encourage the more able to use the scientific vocabulary when describing what they are doing, including the word 'germination'. Ask them to talk about what the seed needs for germination to occur and for the plant to grow. Explain that the cress needs to be in a warm place for germination to happen. Place one Cress Head in a cupboard and ask them to predict what will happen to it. Give them the record sheet in resources and ask them to start a 'Record of Cress Growth'. The sheet will ask them to look every three days, so talk about when that will be. You might want to make a timeline or highlight a class calendar, so all chn have a visual reminder about when they will be filling in their cress records. The resources also contain a class record sheet for monitoring the growth of the cress head in the cupboard. Choose a monitor (a group, your 'star of the week', 'scientist of the week', learning assistant, for example). Ask the chn: *How long do you think it will take for the cress to grow long enough to eat? What would we eat it with? What do you think it will taste like? Has anyone had cress before? What do you think it contains that makes it a good food for us to eat?* |
| Plenary | Also allow the chn some time to fill in their 'Bean in a Bag' diary, looking at their own bean and also the class one in the cupboard. When they have predicted what will happen to the cress in the cupboard, ask them to draw comparisons between the Cupboard Bean's growth and what might happen to the Cupboard Cress. |
| Outcomes | Children will* Understand what plants need to be healthy
* Know that cress seeds need water and the right temperature to germinate and grow
* Predict, and begin to give reasons for, what will happen to the cress in the dark cupboard
* Start a record of the cress growth
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