**The University of Manchester - Daily Lesson Plan**

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| **Class** | **5W** | **Date** | **23/11/20** |  | **Week No.** | **3** | **Lesson context** |  **Lesson 3 of 8 lessons** |  |
| **Subject area** | **Science - Investigating falling seeds** |  |
| **Lesson objective**  | * SK describe the life process of reproduction in some plants and animals
* WS planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
* WS taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
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| **Success criteria: (**differentiated where appropriate) | * I can ask a question and plan my own investigation to find the answer.
* I can make a test fair.
* I can say why I need to repeat some measurements.
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| **Are there any specific safety aspects to consider** e.g. specific equipment, moving tables, outdoorspace? | * Only allow children to stand on chairs if they are doing so sensibly and carefully.
* Warn children not to stand on tables.
* Warn children to move around the room carefully when investigating.
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***PLEASE ADD MORE SECTIONS BELOW, IF NEEDED***

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| **Lesson section and timings** e.g. introduction (whole class or specific groups), focus group teaching input, independent work, end of lesson  | **Lesson development**(use the planning bookmark to ensure that all aspects of an effective lesson are considered and planned) |
| **10 mins - Intro****Whole class** | 1. Remind children of last week’s work - collecting and dissecting fruit and berries to find seeds.
2. Q – Why were there seeds inside the fruit? What other ways are seeds dispersed?
3. Watch BBC seed Aviation video <http://www.bbc.co.uk/programmes/p00lxw4t>
4. Discuss why seeds need to get away from the parent plant. Discuss why the best seeds are those that fall slowly.
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| **20 mins – Planning****Groups of 3** | 1. Explain the task – to investigate ‘Which are the best wind dispersed seeds?’
2. Put chn. into groups of 3.
3. Let children explore a sample of seeds on the table.
4. Chn. to choose a question e.g. investigating different sized seeds of the same shape or comparing different shaped seeds or comparing lime spinners with different numbers of seeds on.
5. Recap Fair test – Show ‘Fair test Fatima Powerpoint’. Change one variable, measure one variable, keep the rest the same
6. Chn. to plan fair test in groups of three using Wind Dispersed Seed Investigation sheet including making a prediction.
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| **20 mins – Investigating****Groups of 3** | 1. Ask chn. to say why they think repeated measurement may be needed.
2. Show how to use the Seeds Investigation Results spreadsheet to average.
3. Chn. to carry out test. Observe and monitor progress. Question groups about how they have made their tests fair and why they need repeated measurement in this investigation.
4. Save spreadsheet results
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| **10 minus – Plenary****Whole class** | 1. Ask chn. to define ‘conclusion’ – the answer to the investigation question.
2. Check all groups have made and written their conclusion on Wind Dispersed Seed Investigation sheet.
3. Choose some groups to feedback their conclusions. Discuss these. Explain that some groups may have different conclusions depending on the types of seeds tested.
4. Chn. To self-assess against success criteria

Extension: Watch gliding animals video <http://www.bbc.co.uk/programmes/p00l3sjj> |
| **Vocabulary****Display on board** | seed, sycamore, ash, lime, maple, acer, thistlefair test, conclusion, variable, measurement |
| **Resources** | * Selection of different types of wind dispersed seeds including sycamore, ash, lime, maple, acer, thistle
* Stopwatches
* Metre rulers
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**Assessment and evaluation of progress achieved (after lesson)**

Assess children’s progress against your lesson SC, to inform you of their progress and achievement of the L.O

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| **Success criteria***(cut and paste from S.C box above)* | **Names of those below (-) or exceeding (+)**  | **Action required? (Now what?)**What do you need to do to respond to your assessment and children’s emerging needs? Changes to planning (show on weekly plan)? Targeted intervention? Change of group? Change of support? |
|  | (-)  |  |
| (+) |  |
|  | (-) |  |
| (+) |  |
|  | (-) |  |
| (+) |  |
|  | (-) |  |
| (+) |  |