**Volcano animations**

**Lesson 5: Reflection & review**

**Introduction**

In this final lesson (which is ‘unplugged’) pupils reflect on the unit as a whole by decomposing their learning to identify all the steps they undertook in order to produce their animation and record this using a thinking map.

**Time:** @60 minutes

**Materials needed:** lesson presentation, large sheets of paper for pupils to record ideas on, print out of slide 9, access to pupils’ work from throughout the unit.

**Learning objectives**

* To understand and explain decomposition
* To use decomposition to review learning
* To reflect on learning

**Lesson summary**

* Introduction: Get ready (10 minutes)
* Decomposing our learning (40 minutes)
* Sharing our decomposition (10 minutes)

**Introduction: get ready (10 minutes)**

* Use **slide 3** to display the instruction ‘Get Ready’ to pupils. Establish that when they are given this instruction on a school morning it can involve completing lots of smaller tasks.
* Ask pupils to work in pairs or small groups to record down as many different activities that are included in the command ‘Get Ready.’
* Review pupils’ answers by asking for suggestions of the task they think nobody else has on their list.

**Decomposing our learning (40 minutes)**

* Ask pupils to recall the process they have just used when they break the task of getting ready down into smaller tasks and recap the definition of decomposition (**slide 4**).
* Display slide 5 and invite pupils to suggest the different concepts/skills/activities they have developed during this unit in order to make a micro:bit animation. Record these suggestions as a list for pupils to use during their independent activity.
* Explain to pupils that they are going to create a thinking map to decompose their learning within this unit (**slide 6**).
* Model how to do this by adding one of the decomposed items to the thinking map and explaining how it was use e.g. *algorithms - in this unit we learnt how to write algorithms in a flowchart. We used them to plan our dance sequence animation and our volcanic eruption animation.*
* Give pupils time to work in pairs or small groups to produce a thinking map that represents their learning through the unit.

**Sharing our decomposition (10 minutes)**

* Ask groups to share their thinking map with another group, talking through their ideas.
* Once they have finished, encourage those listening to ask questions, use **slide 7** as a prompt.
* Discuss as a class the learning they have gained throughout the unit, giving pupils time to think/pair/share the questions on **slide 8**.

**Extension ideas:**

* Using the context of learning in another curriculum area create a flowchart to show all the steps that pupils undertook before completing the final product (e.g. writing a character description in English).

**Differentiation**

**Support:**

* If you have access to tablets, using presentation software would allow pupils to capture images of the work they have already produced and record narration to explain how this was used.

**Stretch & challenge:**

* Pupils could organise their ideas into a more formal piece of writing where they explain what decomposition is and how they have used it in this unit. They can also be encouraged to go into greater detail about their use of repetition and decomposition in algorithms and programs.

**Opportunities for assessment**

* Informal observations of pupils’ understanding of decomposition during activities and discussions.
* More formal assessment of pupils’ thinking maps.