# Lesson Plan

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| **Title:** Moonsaic | **Date:** |
| **Learning objective/s:**   * To understand the Moon is spherical in shape. * To develop an understanding of the surface and features of the Moon. * To understand the phases of the Moon. | **Curriculum links:** |
| **Learning outcomes**  **I want evidence children can:**   * Talk about what causes illumination on the Moon. * Describe the surface of the Moon. * Understand the phases of the Moon. | |
| **Notes on children who have exceeded the performance expected:** | **Action to be taken:** |
| **Notes on children who did not achieve the performance expected:** | **Action to be taken:** |
| **Essential vocabulary:**  Craters, shadows, surface, sphere, Lunar cycle, phases, crescent | **Possible misconceptions:**  Shape of Moon is spherical despite us seeing a 2D circular disc in the sky.  The Moon is not a light source, the light areas are where the Sun’s light is reflecting. |
| **Cross curricular links:**  Mathematics, Art, ICT. | |
| **Teacher resources including ICT:**   * Printed ‘Moonsaic’ data files. | **Children’s resources including ICT:**   * Each group will require a set of printed ‘Moonsaic’ data files from a phase of the Moon. |

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| **Organisation and class management:** | **Teaching points:** | **Notes:** |
| **Introduction:**  Whole class discussion | * Discuss the learning objectives and the task with the class. * Show children an image of the Moon. * What shape is the Moon? * How would we describe the surface? |  |
| **Main phase:**  Working in small groups | * Provide each group with a printed set of data files. Different groups could work on different phases to provide further discussion at the end. * Explain these are close up images of the Moon taken using a powerful telescope. * Groups to arrange the printed images to form a large image of the Moon. * Children should be encouraged to look closely at the surface and to describe what they can see. |  |
| **Plenary/Conclusion:**  Whole class discussion | * Look at the completed ‘Moonsaics’ from all groups, why are they different? What causes the phases of the Moon? * Discuss the 28 day Lunar cycle. * EXT: Children could be asked to keep a ‘Moon Diary’ as homework, to track how the shape of the Moon changes during the cycle. |  |