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| **Drop Down Day** | | **Science Lesson**  **(year 7)** | **Topic: Ancient African Astronomy** |
| **Key Learning Objective(s):**  **(Non- calculator lesson)**   * Identify magic squares * Identify patterns in magic squares * Solve magic square problems * Create magic squares using algebra * Rotate and reflect magic squares | | | |
| **Resources:**  Ancient African Astronomy Presentation:  <https://www.canva.com/design/DAE-zH7PtM8/f493b6_lnFACV1_ey8OBsw/view?utm_content=DAE-zH7PtM8&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton>  Ancient African time keeping instruments matching activity:  <https://1drv.ms/w/s!AsYwSwoGOxWzoVBQf986r0scPO92?e=fGdKCS>  Day and Night worksheet:  <https://1drv.ms/w/s!AsYwSwoGOxWzoVK2xgGFQASZko6W?e=MkwSG6> | | | |
| **Suggested timings:**  **10 mins**  ***10 - 15 mins***  ***5 mins***  ***5 mins***  ***10 mins***  ***5 mins*** | **Lesson sequence:**  Introduce Astronomy as in slides and discuss question responses as a class. Present and discuss historical context and introduce Nabta Playa. Watch video clip.  Discuss with students their ideas about how the Ancient Egyptians may have observed and investigated Day and Night. Display Ancient time instruments.  **Student activity 1:**  Ancient time instruments matching activity. Students should cut out and stick in correct arrangement. Write notes about how each instrument was used.  Review and discuss.  Watch video clip about Byzantine ancient time instrument. Write down some developments made to the new device.  Why do we have day and night? Discuss.  **Teacher led activity:**  Explain how Day and Night is created by the Sunlight and shadow. Demonstrate with dynamic visual.  **Student activity 2:**  Complete Day and Night worksheet.  Review, discuss, summarise.  Play video ‘My room at the centre of the universe’  **End of lesson** | | |