Journey to the Moon

Information for KS2 teachers and group leaders
**Show synopsis.**
To mark the 50th anniversary of the Apollo 11 mission which successfully landed astronauts on the Moon, this show will explore the relationship between the Sun, Earth and Moon including why we get day & night and why we see different shapes of the Moon as well as a quick tour of the other planets in the solar system.

There may be elements of the show that the children are not familiar with (especially for Y3/4 classes if not yet studied Earth & Space) but nevertheless we hope they will be entertained and engaged enough to find the session memorable and we hope they will learn one or two new things.

**Is there anything I need to do to prepare the children before the visit?**
There are no essential pre-visit activities which you need to complete beforehand but if you’re not currently doing anything on space or the moon landings in class, it might be useful to gently introduce the topic before you come to eureka! so the children are a little more familiar.

Useful websites:

[www.google.co.uk/moon](http://www.google.co.uk/moon) You can use Google Moon to explore the Moon’s surface and to find the six marked Apollo landing sites. Zoom in closer to see each landing site in detail.

[http://www.esero.org.uk/](http://www.esero.org.uk/) ESERO-UK, also known as the UK Space Education Office, aims to promote the use of space to enhance and support the teaching and learning of Science, Technology, Engineering and Mathematics (STEM) in schools and colleges throughout the UK.

[http://www.destinationspace.uk/](http://www.destinationspace.uk/) Eureka! is pleased to be part of this national programme which aims to engage, inspire and involve families, schools and communities across the UK with the amazing stories and innovative science and engineering of the UK’s world-leading space sector.

**Risk assessment**
- Please visit our website [https://www.eureka.org.uk/education/resources/](https://www.eureka.org.uk/education/resources/) to download both the general museum risk assessment and the one for your chosen session.
- We advise you to make a preview visit to carry out your own risk assessment for the overall visit.
**Evaluation**

Eureka! constantly aims to improve its programmes for school groups and feedback from adults and children is an essential part of this. We value all comments made and will always try our best to act upon them. An evaluation form will be given to you at the end of your session and we ask that you complete and return to us as soon as possible using the pre-paid envelope provided. A copy of the evaluation form is also included in this pack should you wish to complete and return to us via email.

**Additional resources & information**

The following pages contain various supporting resources and information related to the science show.

Please find the following documents in this pack:

- **National Curriculum links** – *showing how the workshop fits in with the national curriculum for science.*

- **Teacher’s assessment chart** - *this outlines the aims and objectives of the show, including the key activities which children will be taking part in and their learning outcomes.*

- **Evaluation form** – *a copy of the form which will be handed to you at the end of your session.*
<table>
<thead>
<tr>
<th>Year</th>
<th>Programme of study</th>
<th>Links to:</th>
</tr>
</thead>
</table>
| 3    | Light             | - Recognise that they need light in order to see things and that dark is the absence of light  
|      |                   | - Notice that light is reflected from surfaces  
|      |                   | - Recognise that light from the sun can be dangerous and that there are ways to protect their eyes |
| 5    | Earth and space   | - Describe the movement of the Earth, and other planets, relative to the Sun in the solar system  
|      |                   | - Describe the movement of the Moon relative to the Earth  
|      |                   | - Describe the Sun, Earth and Moon as approximately spherical bodies  
|      |                   | - Use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. |
| 5    | Forces            | - Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object |
**Aims and objectives – by the end of this show children should have learned:**

- About the Apollo missions and how humankind first landed on the Moon
- That gravity is a force which pulls things towards the Earth
- Understand how we get day and night, phases of the Moon and how the position of the Earth in relation to the Sun determines the seasons
- Learn the names and order of the 8 planets in our solar system

**Overview:** Through a series of interactive activities, powerpoint presentation and discussion, this show offers fantastic insight and learnings into what it takes to undertake a space mission.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How far away is the Moon? – an interactive demo &amp; discussion about how far the Moon is from Earth</td>
<td>To gain a greater understanding about the distance between Earth and our nearest neighbour in space, the Moon.</td>
</tr>
<tr>
<td>The Apollo programme – through images, videos &amp; discussion we'll look closer at this historic event</td>
<td>To find out more about NASA’s Apollo programme and how humankind first landed on the Moon.</td>
</tr>
<tr>
<td>How do we get into space? – an ‘explosive’ demo about rockets.</td>
<td>To learn the basic principles of how rockets work.</td>
</tr>
<tr>
<td>Re-creation of the solar system using props and physical theatre.</td>
<td>To understand how we get day &amp; night; how the earth orbits the sun; how the moon orbits the earth; why we get different seasons and phases of the moon</td>
</tr>
<tr>
<td>Putting the planets in order – a chance to re-cap on the names and the order of the planets.</td>
<td>To learn more about the 8 planets in our solar system and the order they appear in starting from the sun.</td>
</tr>
</tbody>
</table>
1. Was this your first school visit to Eureka!? (please circle)  
   Yes       No

2. Was the science show the main reason you decided to make a school booking?  
   Yes       No

3. How did you find out about the Science Show? (please tick)  
   - Eureka!  
   - Eureka! Email  
   - Social Media  
   - Word of Mouth  
   - Other  
   Other, please state ____________________________________________________________________________

4. Measuring impact - Please read the following statements and tick the option which most applies to you.

<table>
<thead>
<tr>
<th>Impact on my class</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel this visit inspired my class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My class learnt something new about Science</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I feel my class will be more interested in Science than before they came</td>
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<tr>
<td>Eureka! is a good place to learn about science in a different way to school</td>
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</tr>
</tbody>
</table>

   | About Me                                                                        |                |       |                            |          |                  |
   | I discovered something new during my visit                                      |                |       |                            |          |                  |
   | The visit made me feel more confident about supporting my class                |                |       |                            |          |                  |
   | in learning about Science                                                      |                |       |                            |          |                  |
   | The visit made me feel more confident about science                            |                |       |                            |          |                  |
   | I would recommend a visit to other teachers                                    |                |       |                            |          |                  |

5. What do you feel were the highlights of the show?  
________________________________________________________________________________
________________________________________________________________________________

6. Is there anything we could have done to improve the show?  
________________________________________________________________________________
________________________________________________________________________________

7. Would you consider attending another Science Show at Eureka!? (please circle)  
   Yes       No

   If NO would you like to tell us why not?  
________________________________________________________________________________
8. Is there anything else you would like to tell us either about the science show or any other aspects of your visit?

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

We’d love to hear what the children thought about the session too. As a follow-up activity the day after why not ask the children what they can remember about the science show and their visit to Eureka! and use the speech bubbles below to capture some of their thoughts.

Thank you for your comments.

Please return to: **Jenny Parker, Play & Learning Manager,** Eureka! The National Children’s Museum, Discovery Road, Halifax, West Yorkshire, HX1 2NE, jenny.parker@eureka.org.uk