







### **Foundation Phase**

### Museum staff activity

Morning visit with 1 science based session and 2 teacher-led activities with resources provided

### **Brief description:**

Take part in some fun learning with professional science rapper Jon Chase. Join in with activities and simple investigations to understand light and shadows.

Use our object handling box to investigate a variety of light sources used in the past and discover what life was before electricity.

Use our dark and light themed Explorer Boxes to investigate the museum galleries.

### Feedback from teachers and pupils:

"...an absolute hit with everyone on the trip. The children have not stopped talking about your presentation and the activities. Thank you so much for bringing the topic to life and creating great memories."

### **Knowledge and Understanding of the World**

Time and people

Children should be given opportunities to:

- begin to identify differences between ways of life at different times
- use a range of historical sources, including artefacts and buildings

Myself and non-living things Children should be given opportunities to:

 understand that light comes from a variety of sources, such as the Sun, and that darkness is the absence of light



This session can be adapted for special needs groups – please contact to discuss.

### Learning objectives to:

- Know the difference between reflective surfaces and light sources.
- Know how light travels through some objects, and not through others to produce shadows.
- Explore different light sources used in the past.

To make a booking: Tel: (029) 2057 3600 E-mail: <a href="mailto:Learning.Waterfront@museumwales.ac.uk/learning">Learning.Waterfront@museumwales.ac.uk/learning</a>
For more details see: <a href="www.museumwales.ac.uk/learning">www.museumwales.ac.uk/learning</a>

Activity Skills LNF	

**Dark and light:** During this 1 hour science based, facilitated session, children will work with professional science explainer, Jon Chase. It is an entertaining look into the way that light impacts upon our lives, presented in Jon's fun and unique way. It identifies the difference between reflective surfaces and light sources as well as highlighting how light travels through some objects, and not through others to produce shadows. Children will to explore different ways to manipulate light and shadow as well as becoming familiar with the concept of silhouettes.

#### Object handling session:

- 1. **For younger children:** During this 30 minute teacher led activity, the teacher will lead the class to explore a range of different light sources used in the past. Using the notes supplied with each object, the children will begin to identify differences between ways of life at different times. This activity will take place in an allocated space or room and all resources will be supplied.
- 2. **For older children**: During this 30 minute teacher led activity, the class will divide into groups and a group leader is appointed. Each group leader is given a prompt card and one of the objects. The group discusses the object using the prompts on the card and agrees a description to report back to the class (Allow 10 minutes). Before the children report back, ask them to agree on what they feel are their most interesting or important discoveries. The groups then present to the class give a time limit for the presentations. (Allow 10 15 minutes). Ask the children to make a detailed, annotated drawing of the object to record their investigations. (Allow 10 minutes). This activity will take place in an allocated space or room and all resources will be supplied.

**Explorer Boxes**: During this 30 minute teacher led activity, the class will break into groups to explore the contents and activities in a *Dark and light* themed box. Children will be encouraged to develop language and observational skills through asking and answering questions. Each group and box needs to be led by an adult leader from the visiting school. Guidelines for adults will be on hand for each activity including questions to ask, explanations and other relevant information. This activity will take place on the galleries and all resources will be supplied.

### Knowledge and Understanding of the World

listening to others' ideas thinking

creatively and imaginatively

Literacy - Oracy:
Developing and
presenting
informational
and ideas.
Aspect:
collaboration
and discussion

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### Resources that your pupils will use during the visit:

**Explorer Boxes**: replica objects and language activities based around these objects are included along with adult leader notes.

**Object handling session:** replica objects and authentic objects, and all resources and information will be supplied on the day of the visit. Please remind the children to carefully handle the objects.

### **Health & Safety Information for schools:**

http://www.museumwales.ac.uk/en/learning/healthandsafety/

#### **Preparations:**

- Which lights we use in our daily lives? For example, when do we use candles? What would it be like at night if all we had were candlelight?
- Which lights were used in past?
- Are any lights dangerous?
- Do some lights give better light than others?
- Ask the children to think of some questions to ask Jon Chase.

#### Follow-up activities:

- Make a list of topic words e.g. sun, moon, transparent, shadow, silhouette, translucent, reflect etc.
- Make a collection of light sources and label them according to how they give light e.g. battery, electric, natural etc.
- Make a simple shadow puppet theatre with script to explain concepts about light and dark or to tell other stories.
- Make silhouettes of profiles like people did in the days before cameras.
- Investigate or collect black and white photographs, and early photography.
- Make images with small objects using sun sensitive paper.
- Explore the design features of different light sources. What is good design or bad design? Make comparisons between different types of the same light source (e.g. a range of torches made of different materials, sizes, designs, technologies).
- Explore the design of lights for different environments for example, in schools, offices, bedrooms, dental surgeries, shops, museums or theatres.