

## WASP 4 – Contents

The Woodside Australian Science Project (WASP) is an initiative supported by Woodside and Earth Science Western Australia (ESWA).

These activities are designed to support the Earth & Space Science topic required by the Year 4 Australian Curriculum.

Copies of this and other supporting materials can be obtained from the WASP website <http://www.wasp.edu.au> or by contacting Julia Ferguson, [Julia@wasp.edu.au](mailto:Julia@wasp.edu.au)

|                |                               |
|----------------|-------------------------------|
| <b>Topic 1</b> | <b>Weathering and Erosion</b> |
| <b>Topic 2</b> | <b>Soils</b>                  |
| <b>Topic 3</b> | <b>Fossils</b>                |
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### **Earth & Space Science**

#### ***Science Understanding***

Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)

- collecting evidence of change from local landforms, rocks or fossils
- exploring a local area that has changed as a result of natural processes, such as an eroded gully or river banks
- investigating the characteristics of soils
- considering how different human activities cause erosion of the Earth's surface

#### ***Science as a Human Endeavour***

##### **Nature and development of science**

Science involves making predictions and describing patterns and relationships (ACSHE061)

- exploring ways in which scientists gather evidence for their ideas and develop explanations
- considering how scientific practices such as sorting, classification and estimation are used by Aboriginal and Torres Strait Islander people in everyday life

##### **Use and influence of science**

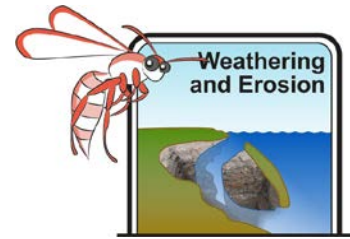
Science knowledge helps people to understand the effect of their actions (ACSHE062)

- considering how to minimize the effects of erosion caused by human activity

#### ***Science Inquiry Skills***

##### **Questioning and predicting**

With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge (AC SIS064)



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### **Science Inquiry Skills**

#### **Planning and conducting**

With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment (AC SIS065)

#### **Processing and analyzing data and information**

Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends (AC SIS068)

### **1 Weathering and erosion.....**

- Rapid Oxidation – Teacher Demonstrations.....
- Acid Rain – Student Activity.....
- A Grave Concern - Student Extension.....
- Stalactites - Student Activity.....
- Biological Weathering - Student Activity.....
- Temperature Weathering – Student Activity.....
- Erosion Means Movement - Teacher Demonstration.....
- Sorting by Movement – Teacher Demonstration.....
- Smaller and Rounder - Student Activity.....
- Biological Erosion - Teacher Demonstration.....
- Erosion – Student Review.....

### **2 Soils**

- A Recipe for Soil - Teacher Demonstration.....
- Soils Brainstorm - Student Activity.....
- Soil Colours - Student Activity.....
- Humus in Soil - Student Activity.....
- Soil Grain Size - Student Activity.....

### **3 Fossils**

- Fossil Evidence for Change - Student Activity.....

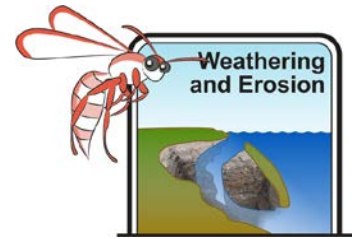
### **4 Landscape Changes**

- Loss of Top Soil – Teacher Demonstration.....
- The Effect of Floodwater on Plants – Student Activity.....
- Changes Due to Drought - Student Activity.....
- Evidence of Local Landscape Change - Student Activity.....

### **5 Man-made Changes**

- Man-made Changes - Student Activity.....

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### 6 Critical Thinking

- Critical Thinking - Student Activity.....
- Evidence of Change - Student Activity.....
- Ruler Rules! - Student Activity.....