



Pathfinder Honour: Requirements & Framework

Geology 1

Part of Nature Category of Honours

Honour Patch



Part of Conservation
Master Honour



Snapshot of Honour

Become more aware of this planet on which we live and its fascinating geological features.

You'll become familiar with terms such as delta, cirque, mesa, alluvial fan, syncline, anticline, billabong and sand spit.

Then there are volcanoes, mountains, rivers and glaciers. Learn about rocks; granite, basalt, lava, sandstone, slate and limestone to name a few.

Best of all, you'll examine the significance of a geological feature in your local area - a great thing to do on a camp-out or an opportunity to study something you haven't noticed before.

Honour History:

Original Honour: 1975, Author not known.

General Conference: Reviewed 2001

South Pacific Division: Reviewed September 2009.

- John Sommerfeld, Glenn Bernoth, Mannie Mehu, South Queensland Conference

Geology 1 Honour

Honour Framework: [Compulsory items are underlined. Others are for guidance]

#Skill Level:	Level 1.
<u>Pre-requisites:</u>	Nil.
Preparation Time:	Average (4-8 hrs)
Physical Requirements:	Minimal
Equipment/Materials Required:	
Location:	Indoors; Outdoors; Excursion etc
Sabbath Appropriate:	Can be adapted
<u>Safety & Legal Requirements:</u>	Refer to and comply with Local, State and Country Requirements. All duty of care must be complied with.
Links to P/F Curriculum: (Cards, Speciality, Pursuits), or AO Modules	
Suggested Teaching / Presentation method(s):	Presentation and Discussion; Excursion; Practical application;
Recommended Assessment:	Workbook & Assessment Sheet which has a checklist of practical requirements and a short test to check knowledge of the honour.
List of Resources:	See Trainer's Notes

#Skill Level. A General Conference term which broadly describes typical physical and mental development. Level 1 (Friends, Companions); Level 2 (Explorers, Rangers); Level 3 (Voyagers, Guides)

Honour Components:

Requirements:	See following page
Trainer's Notes:	Geology 1 Honour Trainer's Notes
Student's Workbook:	Geology 1 Honour Workbook
Assessment Sheet:	Geology 1 Honour Assessment (On SPD Honour Website but Leader's level access is required)

Geology 1 Honour

Requirements

Source: General Conference of SDA, 31 July 2009.

<http://gcyouthministries.org/Ministries/Pathfinders/Honors/tabid/85/agentType/View/PropertyID/63/Default.aspx>

Note: Any Additional South Pacific Division (SPD) Requirements are in italics

~~Strikethroughs~~ show parts not applicable to the SPD.

1. Give the geological meaning *and examples* of the following words:
 - a. Delta
 - b. Sand spit
 - c. Sinkhole
 - d. Oxbow lake (*ie billabong*)
 - e. Moraine
 - f. Cirque
 - g. Mesa
 - h. Alluvial fan
 - i. Anticline
 - j. Syncline

2. Describe the following:
 - a. A shield volcano as compared to a composite volcano.
 - b. How a glacier moves and what evidences it leaves behind.
 - c. How sediments are laid down by water.
 - d. The different types of mountains.
 - e. Why a river or stream bank often keeps caving in on the outside of a bend.

3. Know what category ~~of rocks~~ (sedimentary, metamorphic ~~rock~~, or igneous) the following rocks are *and give locations or examples*:
 - a. Granite
 - b. Sandstone
 - c. Conglomerate
 - d. Slate
 - e. Shale
 - f. Marble
 - g. Lava
 - h. Limestone
 - i. Basalt
 - j. Gneiss

4. Take a picture, *download a picture from the internet* or make a sketch of each of the following geological features:
 - a. A bed of sediment that is coarser at the bottom and finer toward the top. (This is called normal graded bedding).
 - b. Ripple marks in sand or mud. (Show with an arrow the current direction if possible).
 - c. Gulley erosion
 - d. Mud cracks.
 - e. Soil profile along a stream bank or road cut.
 - f. A sand bar.

5. *Describe / photograph / sketch a local geological feature and explain its significance.*

General Conference Reference No: YOU5650 Geology