

*2-3 Thematic Curriculum - Year 1
Origins*

Theme/Essential Questions

Content knowledge

The Solar System

- What is the solar system?*
- How old is the solar system?*
- What are stars made of?*
- How big is the solar system?*

A solar system is a grouping of planets orbiting a star; stars are dense masses of burning gas; in our solar system the Earth is the third planet and it orbits a star called the Sun; stars provide the source of energy for their planets; some planets have a moon or moons orbiting them; a moon's phases, as seen from the planet, change with the relative position of the sun; some planets, like Earth, rotate on an axis, others do not; because the Earth's axis is tilted, the length of days and nights change and so does the sun's position in the sky, except along the equator; the solar system is so large that distances can be measured in light years;

Planet Earth

- How was the Earth formed?*
- What plants and animals lived on the Earth before people?*
- When did people begin to live?*

Earth is extremely old; its history is not completely known; fossils are the preserved remains, or impressions, of life forms from earth's history; fossils tell us a lot about the past, but do not provide a complete story; there are major gaps in the "fossil record" and we must rely on other evidence; certain conditions must be met in order to create a fossil.

Deep inside Earth is its core, which is mostly nickel and iron; the mantle is the middle part, made of rock and minerals; the rocky crust is made up of oxygen, metals and minerals and is mostly covered with water; its atmosphere is mostly nitrogen and oxygen, and other gases. Prehistoric life began with single cell life forms, followed by simple plants

and animals; life grew more diverse; dinosaurs inhabited the earth approximately 230 million years ago and lived for 130 million years before becoming extinct. In the prehistoric era, humans developed physically, migrated throughout the globe, adapted to diverse environments, and lived in early communities; our early ancestors began to form, make tools, master speech, and develop belief systems. Prehistoric people first lived in hunter-gathering communities and eventually some began adapting into agrarian and pastoral societies.

What is a biome?

What are the biomes?

Plants and animals live together in an interdependent group called an ecological community, adapted to the same climate; these groups are called biomes (arctic tundra, deciduous forest, desert, taiga, tropical rainforest, tropical savannah).

US regions

What are the major US regions?

What is Oregon's geography?

The US has coastal lowlands, eastern mountains, central plains, western mountains, great basin desert and western mountains; Most of the mountains in the US are fault and fold mountains (contrast to Oregon's volcanic mountains); Oregon's geography is diverse including most biomes.

