

Mars - Air and Weather

- Mars has very thin air (about 100x thinner than Earth's).
- There is almost no oxygen to breathe.
- It is very cold and dry.
- It never rains.
- Huge dust storms can cover the whole planet.

Arizona - Air and Weather

- Arizona has oxygen that humans and other animals need to survive.
- It is hot and dry most of the year.
- It gets some rain, especially during the summer monsoons.
- Dust storms can happen in the desert.

Mars - Temperature

- Mars is very cold.
- The average temperature is about -80°F.
- Nights can be even colder!
- Water freezes quickly. Only very salty water can stay liquid on the surface.

Arizona - Temperature

- Arizona deserts are very hot during the day.
- Summer temperatures can go above 100°F.
- Nights can be cooler.
- Water stays liquid most of the time.

Mars - Gravity

- Gravity on Mars is much weaker than Earth.
- You would weigh less there.
- You could jump higher and farther.

Arizona - Gravity

- Arizona has the same gravity as the rest of Earth.
- We cannot jump as high as we could on Mars.

Mars - Desert Environment

- Mars is a giant desert planet.
- It is dry and dusty everywhere.
- There are no plants or animals that we know of.

Arizona - Desert Environment

- Arizona has large desert areas, but it is not entirely a desert.
- It is dry, but not as extreme as Mars.
- Plants and animals live there.

Mars - Dirt

- Mars dirt is red because of iron oxide (rust)
 - This is why Mars is called the “Red Planet”
- Mars dirt contains toxic chemicals called perchlorates. These chemicals can be harmful to living things.
- The dirt does not have organic matter (decomposed plants or animals).

Arizona - Dirt

- Arizona desert dirt can also be reddish - it contains iron oxide, just like Mars!
- Some areas look very similar to Mars.
- Arizona dirt can support plant life.
- It contains nutrients from decomposed plants and animals.
- Tiny organisms in the soil help recycle nutrients.

Mars - Terrain

- Mars has volcanoes, canyons, and craters.
- It has sand dunes and rocky plains.
- Some areas look like they were shaped by water long ago.

Arizona - Terrain

- Arizona has canyons, deserts, and rocky landscapes.
- It also has dunes and volcanic areas.
- Wind and water shape the land.