

Human Impact on the Environment: Current Crises for Human Survival

Life Science: Grade 11 Term 4

Human Impact Tin Talk

This activity can be used to introduce content relating to the causes and consequences of the following (related to conditions and circumstances in South Africa and the world):

- The atmosphere and climate change,
- Water availability and quality,
- Food Security,
- Loss of Biodiversity,
- Solid Waste Disposal.

The activity can be used to establish learner knowledge of the core content and to broaden the understanding of the interrelatedness between the biotic and abiotic factors in the environment and the relationships and consequences of humans between these.

Please use attached lesson plan (Human Impact Tin Talk: FET Grd 11 Life Science) for detailed outline on how to conduct the activity.

Labels and pictures needed for the activity:

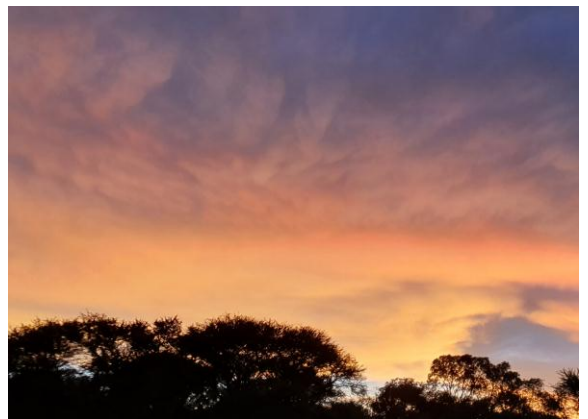
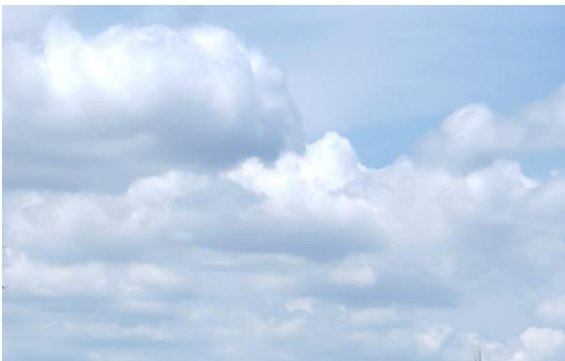
**Non - living things:
ABIOTIC**

Water

Land

Air

Light



Living things: BIOTIC

Plants

People

Animals



Living things need
non-living things
to survive!

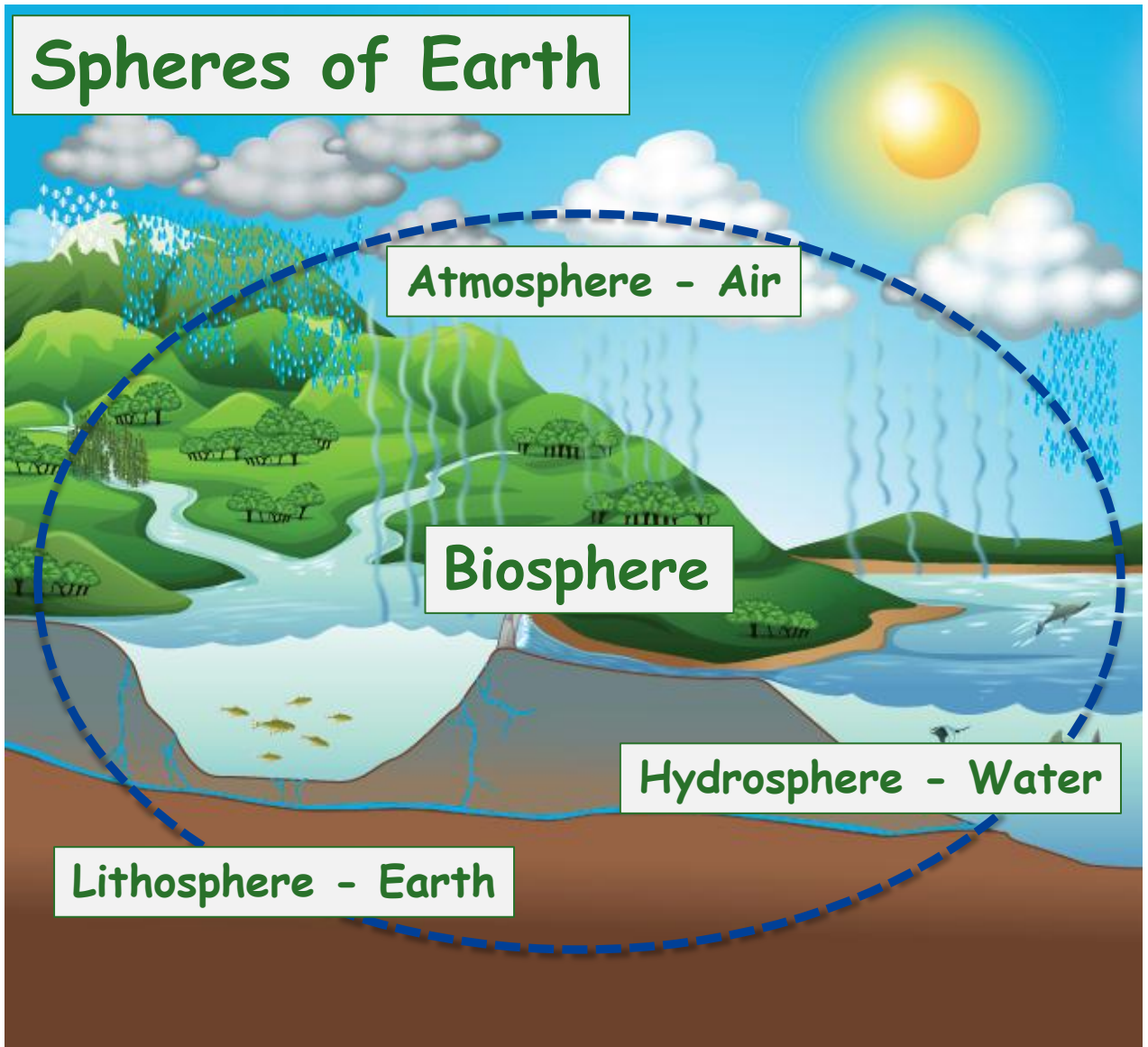
Biosphere

Hydrosphere

Lithosphere

Atmosphere

Spheres of Earth



Human Impact on Environment.

Current crises -
Problems to be solved

Food Security

Atmosphere and Climate Change

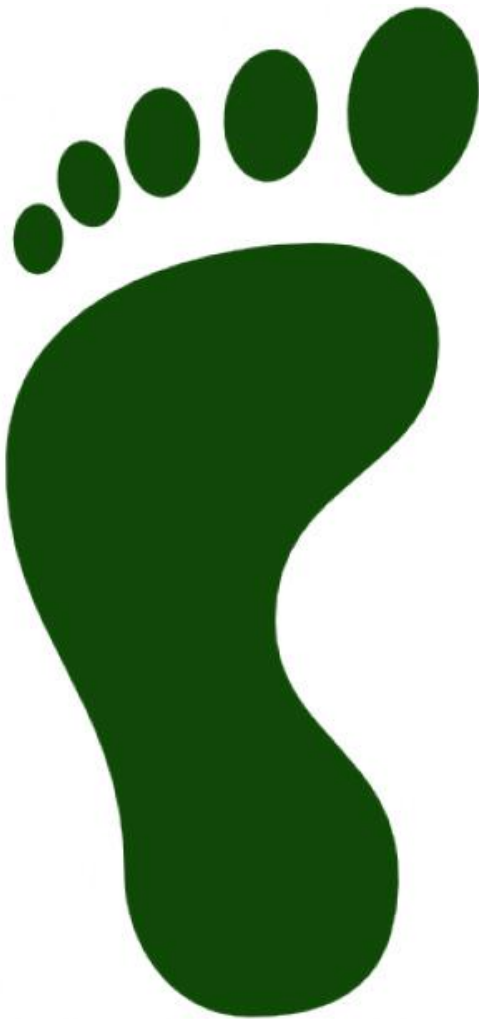
Loss of Biodiversity

Water Availability and Quality

Solid Waste Disposal

Current Crises

is our



How do we improve handprint



Activity conclusion notes:

By understanding the interrelatedness between the biotic and abiotic factors in the environment and the relationships and consequences of humans between these, we can work on improving our everyday behaviour towards combatting the current crises for human survival.

By changing our own behaviour and our own way of thinking by becoming more conscious in our own personal decisions we can help address the problems that need to be solved within the next generation.

The atmosphere and climate change crises will not go away if we do not consciously start to think differently for instance about renewable energy sources and even simple things like using a lift club or cycling to and from places.

Water availability and quality will continuously become less and become poorer in quality if we do not change our own behaviour to how we use water and how we manage waste that ends up in water for instance.

Due to our changing environment, food security will continue to remain an obstacle in achieving zero hunger in an ever growing local and global population. Becoming conscious towards what and how much we eat (changing our own behaviours) can have a big impact on food availability. Becoming sufficient in growing our own fruit and vegetables through sustainable farming practices can also help address this issue.

Loss of biodiversity describes the loss in the variety of life and can lead to a breakdown in the functioning of the ecosystem and this in turn will impact for instance on all spheres of the earth. Biodiversity boosts ecosystem productivity where each species have an important role to play. Larger numbers of plant species means a greater variety of crops and greater species diversity ensures natural sustainability for all life forms.

Proper disposal of solid waste is critical because there is potential to cause disease, and pollute soil and water. The more waste there is, the less land there is to be used for other purposes. Becoming conscious with the amount of waste we produce on a day to day basis and changing our daily behaviour by making conscious decisions when buying towards packaging for instance and by reusing and recycling items, we can help to minimise the amount of solid waste in our environment.

It's starts with each individuals choices. Care for yourself, Care for others, Care for your environment.