3055 BA SANGAM COLLEGE



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WORKSHEET 21

School: <u>Ba Sangam College</u>

Name: _____

Subject: Basic Science

Year/Level: 9

| Strand 2 | Matter |
|--------------------------|--------------------------------------------------------------|
| Sub Strand 2.1 | Materials |
| Content Learning Outcome | Investigate how the properties and interactions of materials |
| | influence their use. |

Lesson Notes

Natural rubber

- ➢ is a polymer
- ➢ is capable of returning to its original shape after a large extension
- > Vulcanization-process of adding sulphur to rubber
- Sulphur is added to rubber to make it more stronger
- Rubber can be used to make water proof sheets elastic, erases, shoes, stoppers, tube, and tyre and insulators

Some properties of rubber that make it useful

- ➢ Waterproof
- Durable
- ➢ Elastic
- ➢ Unreactive
- Non-conductor of electricity

Plastic and the environment

- Plastics are made from compound derived from petroleum
- When plastics are used and thrown away, they remain as litter in the surrounding
- One solution to plastics pollution is recycling
- There are four different kinds of plastics and should be sorted out before recycling
- The best solution involves recycling, reusing, reducing the use of plastics
- Paper bags can be used instead of plastics

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Petroleum products and coal

What is fuel?

- Source of energy
- Needed to operate machinery
- Give out carbon compounds when they burn and cause air pollution
- The cleanest fuel is nuclear fuels
- Earliest form of fuel were wood ,peat and coal
- Fuels can be of two types

a) fossil

- Are non-replaceable
- Takes millions of year to form
- Examples : coal, crude, oil etc
- b) Non-fossil
 - Replaceable
 - Examples : wind or water generated energy, nuclear energy and solar power

Coal

- Formed from remains of tropical rainforest millions of year ago
- It is believed that the climate changed and the trees died
- Mud, sand , and loose rocks must have buried these after some time

Oil

- Oil is formed from the remains of marine organism
- The remains, while rotting at the bottom of the sea ,get covered with further deposits and with sediments
- The sediments eventually harden and forms rocks
- The oil can only be pumped out if it has been concentrated and caught in a trap.
- The oil layer collects between water and gas.

Exercise

1. List 3 uses of rubber in our everyday lives.

| | (2 marks) |
|---------------------------------------------------------------------------|-----------|
| 2. What are the main differences between the formation of oil and coal? | |
| | |
| 2. What is the main point of similarity in the formation of oil and coal? | (2 marks) |
| 3. Suggest why oil collects between water and gas layer | (1 mark) |
| | |
| 4. What are fossil fuels? | (1 mark) |
| | |

(1 mark)



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