**Experiment 2: UV Radiation and Damage to Life – Pupil Sheet**

|  |  |  |
| --- | --- | --- |
| LI: | We are learning about the topic of environmental change. (SCN 2-20b) |  |
| SC: | I can contribute to an experiment about harmful UV rays. |  |
|   | I can identify ways to block UV rays to avoid skin damage. |  |
|  | I can use a guide to determine the best UV block. |  |
|  |  |  |

1. Record your findings in the table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | No activity | Darkens by 0-2 shades | Darkens by 2-4 shades | Darkens by >4 shades |
| Sunscreen / material 1 |  |  |  |  |
| Sunscreen / material 2 |  |  |  |  |
| Sunscreen / material 3 |  |  |  |  |

1. Things to think about during your investigation:
2. What might happen in an experiment with no block?

*The beads you are using change colour under UV light because of complex chemical changes (reactions) between the plastic and UV radiation.*

1. How does this link to UV damage on planets?

*If there is no protection from the atmosphere, ultraviolet radiation is damaging to life as it causes damage to cells or chemical changes. Ultraviolet radiation in sunlight can limit growth of life.*

1. How do animals and plants life protect themselves against UV radiation (tanning)? What would life on a planet like Mars with no ozone shield be like? Why is the ozone hole on Earth is a concern?
2. *Write a definition of the following words then write down any new words or unfamiliar words and their meaning below.*

Investigation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Experiment \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

.........................\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_