

S U M M A R I E S

INVESTIGATION 1: Exploring the Skin

In Investigation One, you explored your skin. During this Investigation, you:

1. used a hand lens to look at your skin and an orange peel.
2. made and looked at a fingerprint and an orange peel print.
3. put a drop of water on your skin and waited for 10 seconds to see what happened.
4. put a drop of water on the inside and outside of an orange peel and waited for 10 seconds to see what happened.

Through these experiments, you found that:

1. both the skin and the orange peel protect what is inside.
2. both the skin and the orange peel are made of layers.
3. each layer of the skin and the orange peel has a function.

INVESTIGATION 2: Harmful Effects of UV Light

In Investigation Two, you explored how UV light can affect the skin. During this Investigation, you:

1. created a model of two layers of skin, the epidermis and dermis
2. exposed the model to UV light for a short time.
3. exposed the model to UV light for a long time.

Through these experiments, you found that:

1. both the epidermis and dermis are damaged by UV light.
2. short-term UV light exposure causes more damage than long-term exposure.
3. once skin is damaged from UV light, it may not be able to be repaired.

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INVESTIGATION 3: Examining Skin Cancer

In Investigation Three, you explored the warning signs of skin cancer. During this Investigation, you:

1. counted the moles on your hands, lower arms, face, and neck.
2. created a model of a normal mole.
3. created a model of an abnormal mole.

Through these experiments, you found that:

1. each student may have a different number of moles on the body.
2. normal moles are small and round with smooth edges.
3. abnormal moles can be large, have an uneven shape, or have a rough edge.
4. abnormal moles may be early warning signs of skin cancer.

INVESTIGATION 4: Protecting Your Skin

In Investigation Four, you explored how to properly protect your skin. During this Investigation, you:

1. looked at how much light and heat the Earth receives during the day.
2. used a model to see how much UV light reaches unprotected skin.
3. used models to determine how to block the most UV light.
4. combined models to see which combinations gave the most protection against UV light.

Through these experiments, you found that:

1. UV light is the strongest between 10 AM and 2 PM.
2. none of the models blocked all of the UV light.
3. sunscreen, clothing, sunglasses, and hats all decreased the UV light that reached the skin.
4. using all of the methods of sun protection together gives the most protection against UV light.

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INVESTIGATION 5: Benefits of SPF

In Investigation Five, you explored the benefits of sunscreen with SPF (Sun Protection Factor). During this Investigation, you:

1. built a model of sunscreen with SPF 45 to test if it blocked all of the UV light.
2. tested models of sunscreen with SPF 15, SPF 30, and SPF 45 to see if they blocked UV light.

Through these experiments, you found that:

1. sunscreen with SPF 45 blocks the most UV light.
2. sunscreen with SPF 15 blocks the least UV light.
3. none of the sunscreens with SPF blocked all of the UV light
4. all of the sunscreens with SPF decreased the UV light that reached the skin.
5. as the number of SPF in sunscreen increased, skin protection against UV light increases.