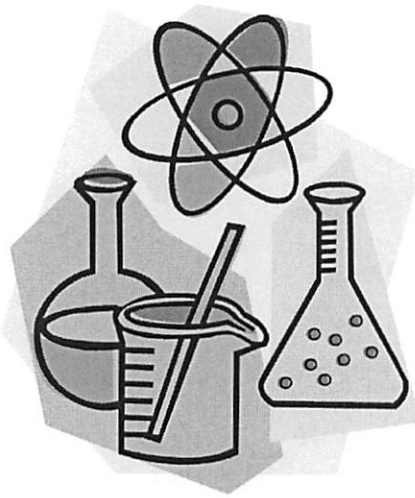


ROAD BRANCH ELEMENTARY & MIDDLE SCHOOL

NTID/SNOW DAY PACKETS



SCIENCE 8

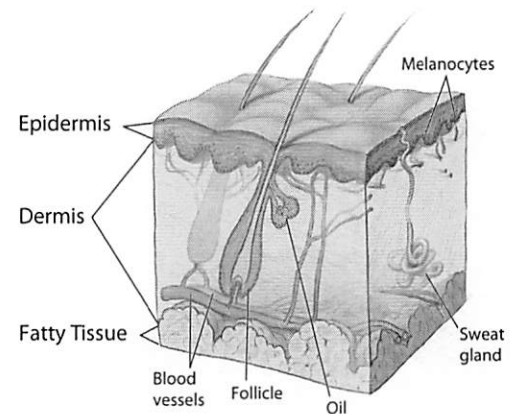
Day 2

Acne



What is acne?

Our skin on the surface has many small holes called **pores**. These pores are connected to **oil glands** underneath the skin by **follicles**. **Acne** is a disease that forms when **follicles** and pores clog up with oil, dirt, make-up (if oily or not removed properly), bacteria and dead skin cells. Acne usually is found on your face, neck, chest, back and shoulders as these areas have the most oil glands that can become plugged.

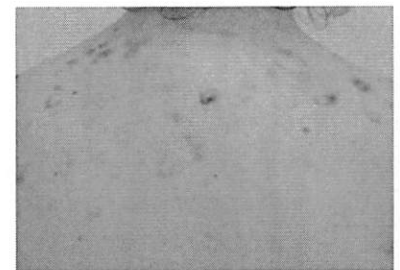


The skin layers including oil glands and follicles

What are the different kinds of acne?

There are many different kinds of acne including:

- Whiteheads: a pimple with a white top.
- Blackheads: a pimple with a black top.
- Papules: a large pimple that is usually hard to the touch.
- Pustules: a large pimple filled with liquid pus.
- Nodules: a large pimple that goes deeper into the skin and is often painful and hard.
- Cystic: This is a large pimple that goes deeper into the skin. It is often painful and soft to the touch.



Cystic Acne. Photo Credit James Heilman, M.D.

Pores: Tiny holes on the surface of your skin that are the openings for hair follicles.

Oil glands: Create and secrete oils onto the skin surface for lubrication and protection.

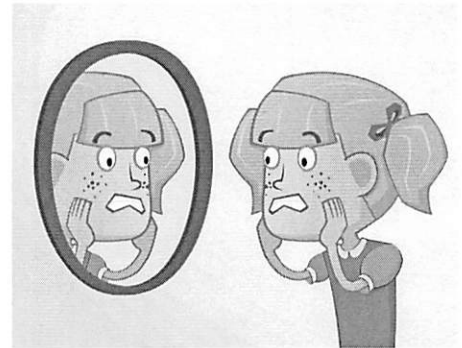
Acne: The result of pores and follicles becoming clogged with oil, bacteria, and dead skin cells.

Follicles: A tube that goes around the bottom of the hair.

Why do people get acne?

There are many different factors that can cause acne including:

- **Hormones:** Change in hormone levels are thought to play a large part in the appearance of acne. Rapidly changing hormones levels cause many teenagers to develop acne.
- **Genes:** Some people are genetically prone to getting more pimples compared to other people.
- **Hygiene:** Improper care of your skin can lead to acne.
- **Stress:** A high level of stress can lead to acne.
- **Diet:** Certain foods such as dairy products and carbohydrate-rich foods have been shown to possibly trigger acne in some people. Greasy foods have not been shown to increase your risk.



Preventing acne:

There are several things you can do to prevent acne.

- **Relax:** Stress is one of the main causes of pimples.
- **Maintaining a healthy diet:** A bad diet can potentially lead to breakouts.
- **Maintain good hygiene:** Keeping your skin clean with certain acne cleansers can prevent the buildup of oil and dead skin cells in your pores.

Interesting Fact!

Approximately 85% of people between 12 and 34 experience at least some form of acne.

Acne treatment:

Acne can be treated with over-the-counter medications or with prescription medications from your doctor or **dermatologist**. These treatments are either given as a pill or as a cream or gel that is applied to the surface of the skin. However they are given, their aim is to kill surface germs, reduce **inflammation** in the area, unplug blocked pores, increase skin healing time and reduce oil production.

It is normal for treatments to take at least four weeks for improvement to be seen and months or years for it to fully clear up. Your acne may also worsen at first.



Treatment using Accutane

Hormones: Chemicals in the body that change during puberty and affect the oil glands.

Genes: Genetic information that makes us who we are.

Dermatologist: A doctor that specializes in skin, hair, and nails.

Inflammation: When one part of the body becomes red or swollen, hot and sometimes painful as a result of injury or infection.

What NOT to do if you have acne:

- Ignore it. Without treatment, acne can cause preventable self-esteem issues as well as permanent scarring. There are many effective treatments available, use them. If your acne is bad, make sure you see a dermatologist as soon as possible.
- Washing more than normal (more than twice a day). Over-washing can actually make acne worse.
- Don't pick or squeeze pimples as it can lead to infection and/or scarring.
- Stopping treatment due to lack of improvement. Many treatments will take weeks or months to take effect.
- Stopping treatment after acne clears up. Your doctor may recommend reducing the treatment but stopping entirely will result in the acne coming back since all you've done is treated the symptoms, not the cause. Whatever lead to the acne in the first place is still there will cause it to return.



Reading Comprehension Questions:

1. What is acne?
2. What is a whitehead?
3. Why do people get acne?
4. Why is relaxing one way to prevent acne?
5. How do acne medications work?
6. Why is it a bad idea to stop treatment once your acne has cleared up?

Extension Questions:

7. Create a poster or infographic that displays what you have learned about acne. This poster will be going up in a doctor's treatment room. Make sure your pictures are clear and your information is correct.

Watch the following video to answer question 8 below. It can be accessed through the URL



(<http://goo.gl/111luy>) or QR Code:

8. How did this video make you feel? Do you know anyone with acne? How do you think they feel on a daily basis? What do you think you and others can do to help those suffering from acne?