

HUMAN GROWTH and DEVELOPMENT

Lesson 1 Males – Grade 4



CLASSROOM EXPECTATIONS:

- We will act in an appropriate and respectful manner, no name-calling, and always use appropriate language.
- Personal stories will not be shared. Please place all questions in the question box if you need further information. Remember what is shared may need to be discussed with counselors or parents.
- Be kind to yourself and others, that extends to our growing, changing bodies, and remember to practice building self-esteem/respect daily.

EXPECTED LEARNING OUTCOMES

Directions: Using 5 small groups, provide one of the Learning Targets below to each group. Allow them to brainstorm to see what they already know and then record their knowledge in their notes. They will revisit and revise their knowledge at the end of the unit after learning the critical content. Monitor and honor appropriate and meaningful responses.

By the end of this unit, the student can:

1. Explain the characteristics of valid health information, products and services.
2. Explain when help is needed in making health-related decisions, including who to ask and why it is important to ask.
3. Explain how behavior affects personal health. Identify examples from this unit.
4. Explain how human body parts and body systems function specific to growth and development.
5. Explain how to avoid or reduce health risks and be responsible for health behaviors. Identify examples from this unit.

Module 1–

Life Skills Reviewed, Endocrine System, Puberty, Anatomy Structures and Functions

LEARNING TARGET BREAKOUT ACTIVITY

Each table group will receive one of the guiding topics/questions below. Using a sheet of paper or your notes, discuss and record preliminary thoughts that best support your group's ideas related to your breakout areas. Remember to keep your work and materials as we will revisit this activity later. You will be able to revise your knowledge after lesson content is provided.

When/who/why should you seek help in making health-related decisions?	**How might your behaviors affect your personal health?**	**What actions can help you avoid health risks?**
How can you access valid and reliable information?	**How might your health behaviors impact your human growth and development?**	

When should you seek help in making a health-related decision?

Who can you ask for help?

Why should you ask?



WORD SORT

ACTIVITY

Endocrine System

Directions: On the next slide, you will see a list of words from the Endocrine System.

- Sort the words on the next slide under each category: Unknown, Known, Familiar

Endocrine System

Word Sort

Known	Unknown	Familiar

Estrogen	Gland	Pituitary Gland	Hormones
Ovaries	Human Growth Hormone	Testes	

HOW DOES THE BODY WORK?

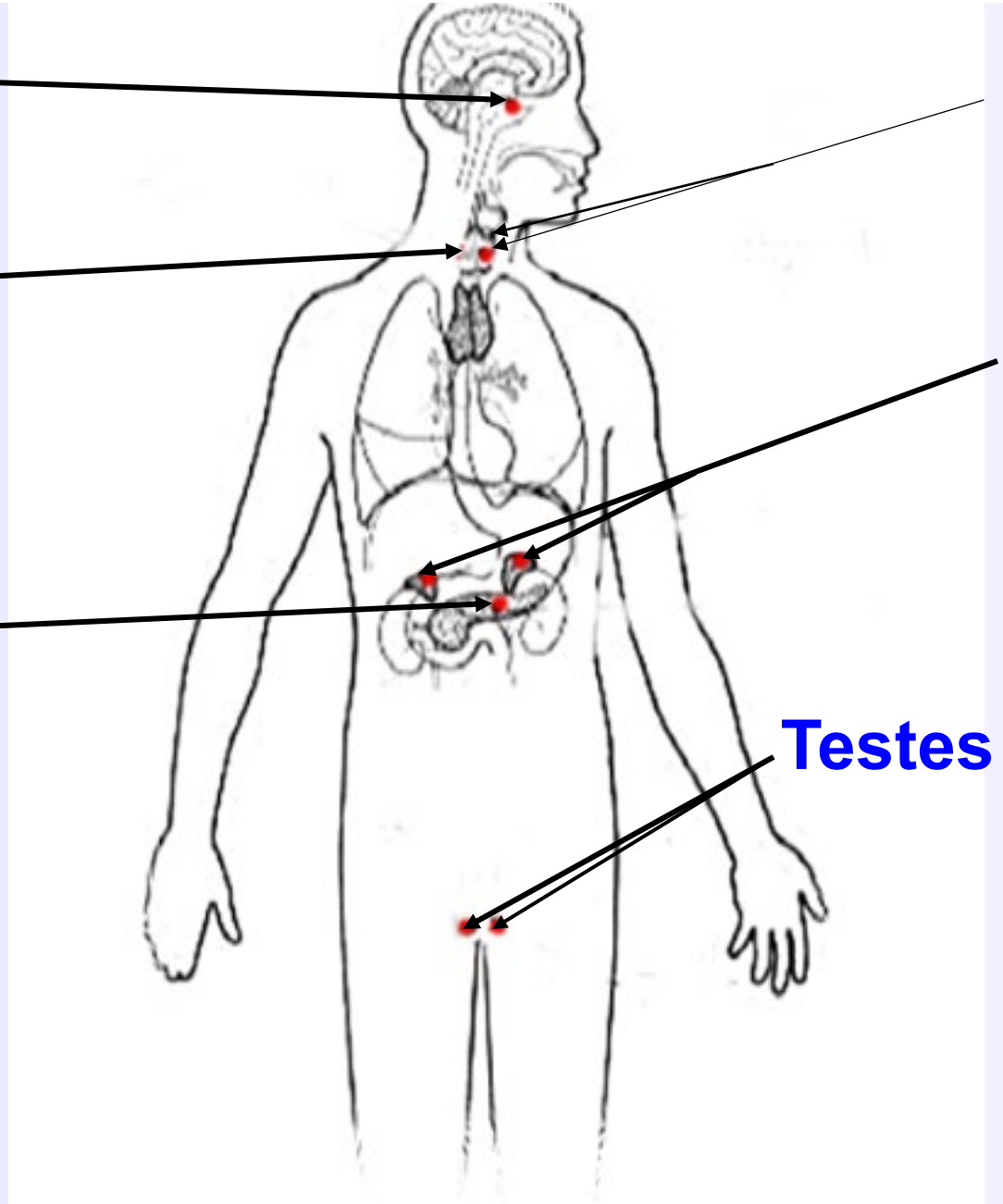
INVESTIGATE The Endocrine System:



Choose your level to build foundation or demonstrate mastery:

- Video on Endocrine System (5:46)

ENDOCRINE SYSTEM/GLANDS



Endocrine System Health Vocabulary

- Gland:
  - An organ that releases chemicals into the body is a gland.
- Pituitary Gland:
  - Called the “master gland” since it controls so many body functions.
- Hormones:
  - Hormones are chemicals that change certain body processes.
- Testosterone:
  - Hormones that produce secondary sex characteristics.
- Human Growth Hormone (HGH):
  - A hormone made by the pituitary gland and is necessary for normal growth.
- Testes:
  - Male sex organs. They are responsible for the development of the primary and secondary sex characteristics and are where sperm are created.
- Secondary Sex Characteristics:
  - Body changes that occur during puberty.

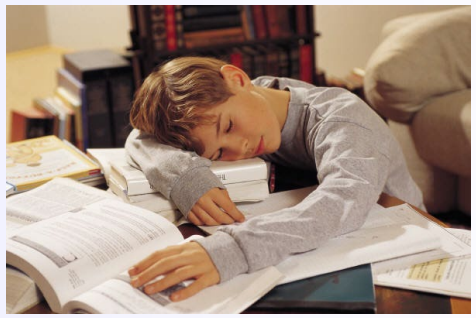
What is Puberty?

- Puberty is the time when a young person's body begins maturing and changing to become like an adult.
- At puberty, many changes begin, such as increased hair growth, growth spurts, skin changes, and voice changes.
- Puberty usually begins between the ages of 10-14 for boys.
- The changes may take place over several years.
- When these changes are complete, the person is physically mature.

Other Changes in Puberty

Environment and Growth

- Growth spurts and voice changes, sometimes even squeaks/cracks, occur during puberty from various surges in hormones. This is completely normal.
- Growth does not depend only on hormones. How people grow also depends on their lifestyle or how they live.
- People need nutritious food, rest, and exercise to be healthy.
- During puberty, your need for nutrition-rich food and rest increases.
- Because your body is changing so rapidly, it uses more energy than it ever has before.
- In order to be as strong and healthy as you can, you must eat healthy foods and get plenty of sleep.
- Choosing a healthy lifestyle is part of becoming a responsible person.







Predict how lifestyle and health behaviors might affect puberty.



WORD SORT

ACTIVITY

Reproductive System

Directions: On the next slide, you will see a list of words from the Reproductive System.

- Sort the words on the next slide under each category: Unknown, Known, Familiar

Reproductive System

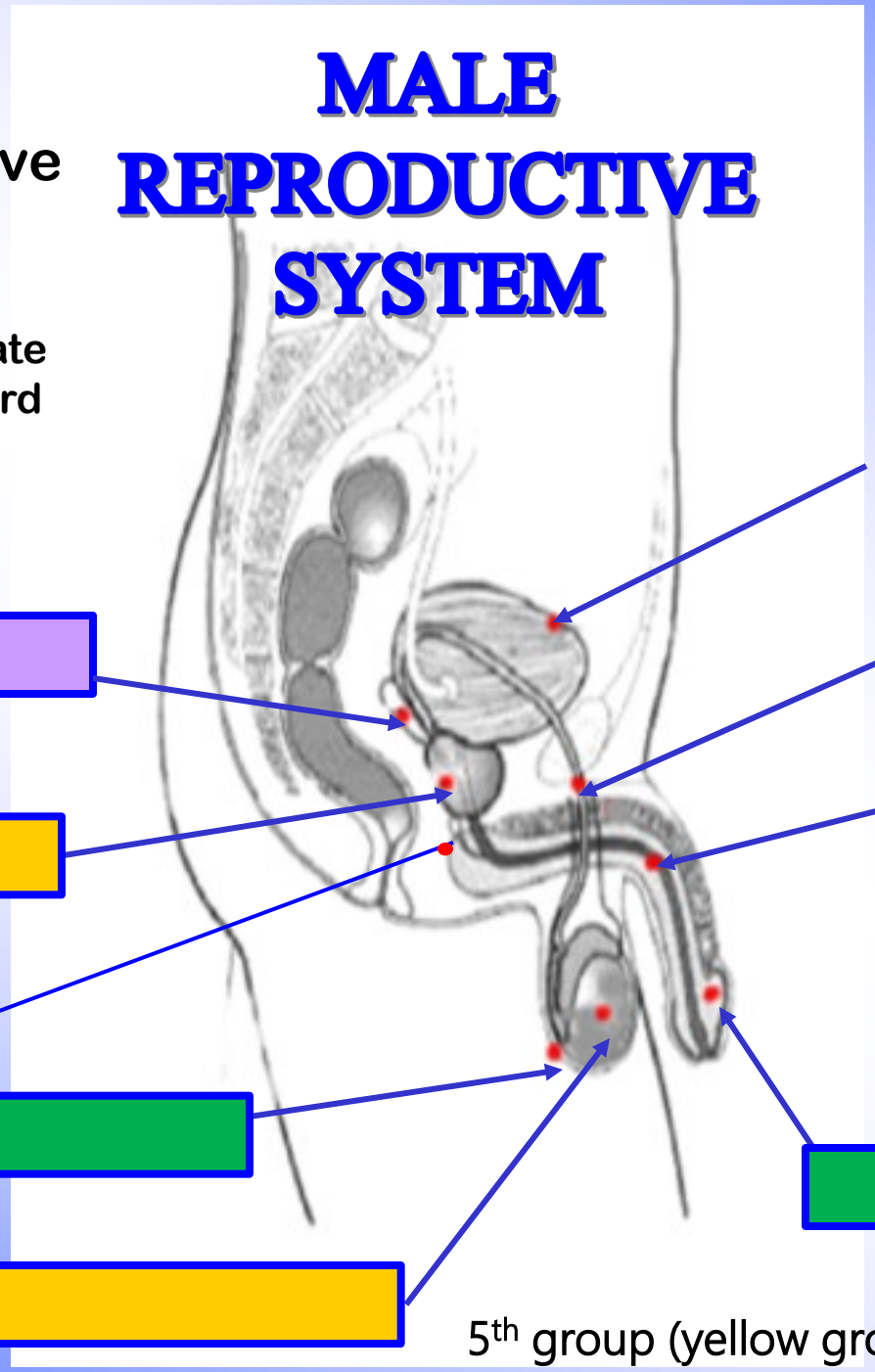
Word Sort

Known	Unknown	Familiar

Penis	Scrotum	Testes	Seminal Vesicles
Vas Deferens	Prostate Gland	Cowper's Gland	Urethra

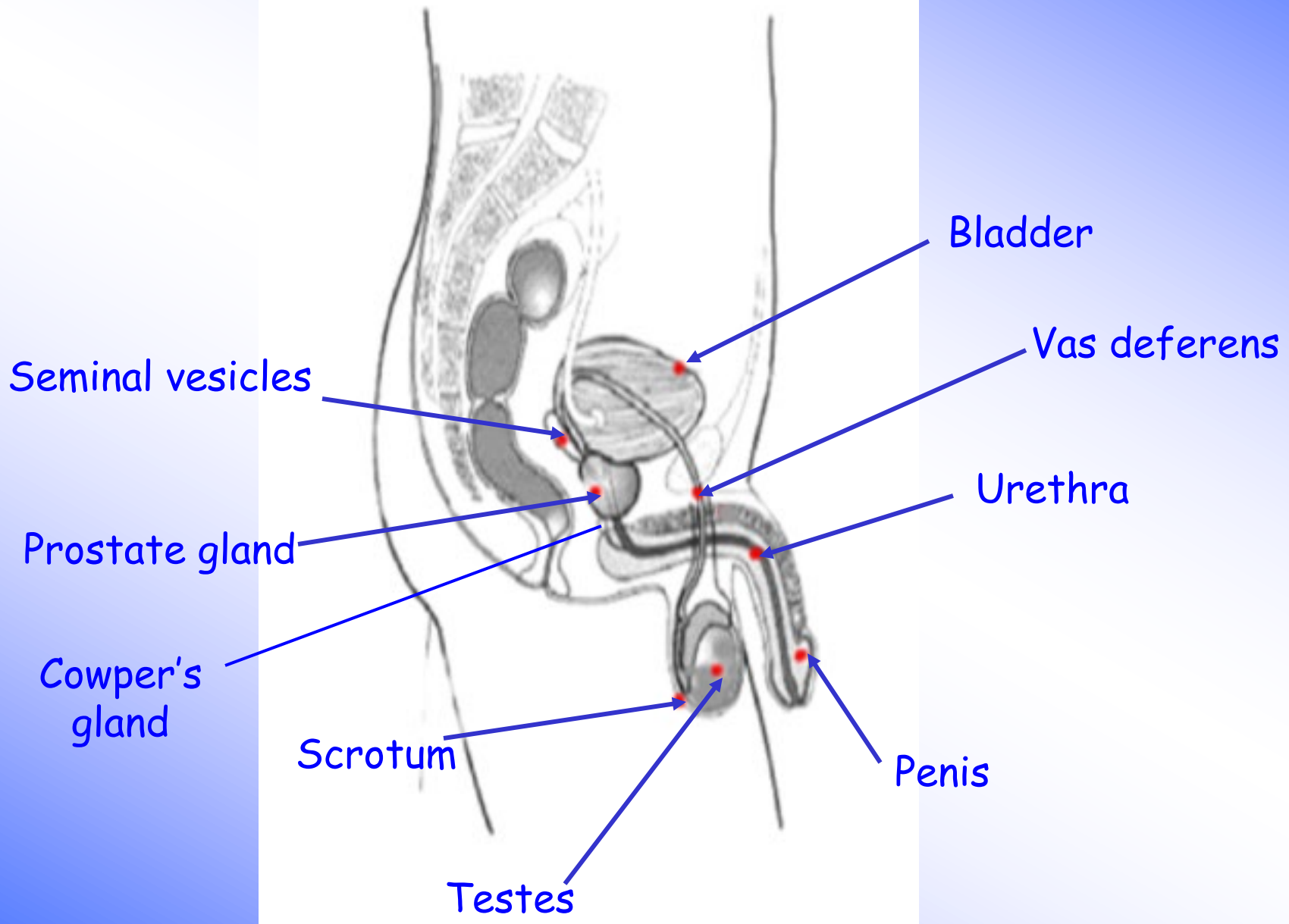
Recall Male Reproductive Anatomy Activity

Assign color groups the corresponding boxes, collaborate and record answers on the board



5th group (yellow group) can determine if correct and revise

MALE REPRODUCTIVE SYSTEM



Male Reproductive Anatomy Vocabulary

- **PENIS**: The male sex organ used to pass urine and semen.
- **SCROTUM:** The sac-like pouch that holds the testes.
- **TESTES**: The two glands that produce testosterone and sperm. The male reproductive cells are called sperm cells.
- **SEMINAL VESICLES**: The two small glands that add a fluid to semen to help sperm move.
- **VAS DEFERENS**: One of two long tubes through which sperm passes from the testes to the urethra.
- **PROSTATE GLAND**: A gland that makes fluid that is added to sperm to help sperm stay alive.
- **COWPER'S GLAND**: A gland that makes the final protective fluid for sperm for easier mobility.
- **URETHRA**: A narrow tube through which urine and semen pass out of the body.

Male Secondary Sex Characteristics

- Increase in height
- Voice deepens (more pronounced “Adam’s Apple”)
- Appearance of facial hair
- Growth of hair under the arms, on the legs, and on the chest
- Growth of hair around the pubic area
- Increase in perspiration
- Broadening of the shoulders
- Increase in muscle mass
- Increase in size of the reproductive organs
- Production of sperm

What you need to know about Testicular Health

- **You should perform a testicular exam regularly after puberty has begun.**
- **A testicular self-exam (TSE) is an easy way for males to check their own testicles to make sure there aren't any unusual lumps or bumps, which can be the first sign of testicular cancer and the most common cancer for males ages 19-34.**
- **Try to do a TSE every month so you become familiar with the size and shape of your testicles. This makes it easier to tell if something feels different.**
- Choose the right time to do your exam. It's best to do it during or just after a hot shower because:
  - the scrotum (skin that covers the testicles) is most relaxed during or after a shower, which makes it easier to feel the testicles for lumps
  - lumps may be as small as a piece of rice or a pea
- **Alert your parents right away if you notice any changes.**

Resource – https://kidshealth.org/en/teens/tse.html

GUY TALK

Questions boys your age might have

Many girls in my class are taller than the boys. I am the shortest one of all. Will I always be short?

Your genes from your biological parents predict your height. Boys can have growth spurts up to age 21 dependent on hormones, growth plates, and environmental factors.

I want to have big muscles. Is it okay to take steroids?

It is never okay to take steroids unless prescribed by your physician for specific treatment and must be followed and monitored very closely. Anabolic Steroids are illegal synthetic drugs that have many harmful side effects. Steroids often cause shrinking of testicles, breast growth, hair loss, violent mood swings, and a higher risk of testicular cancer.

Sometimes I have muscle pains that come and go. Mom says I have growing pains. Are growing pains normal?

It is normal to have muscle pains or tenderness located at growth plate areas. They should not last and will likely not reoccur. Get plenty of rest, drink a lot of water, and eat healthy to support all your normal growth spurts. Smoking and drug use can inhibit normal growth spurts, as well as muscle and organ development.

My voice goes up or squeaks sometimes when I talk. Is this normal?

It is normal for voices to change when hormones begin to release, and the larynx and trachea develop. Smoking and drug use can alter normal voice development as well.



Read Guy Talk and think of any appropriate questions you may have, or you have thought about. If you still need an answer, please use the question slip and put it in the question box.

Question Slip

After listening and participating in the HGD presentations I have a question that I would like answered privately.(select one)

- ☐ In person – in private conversation
- ☐ Written below and returned to me

My question is _____

_____

Student Name _____ Teacher name _____

Answer: _____

_____

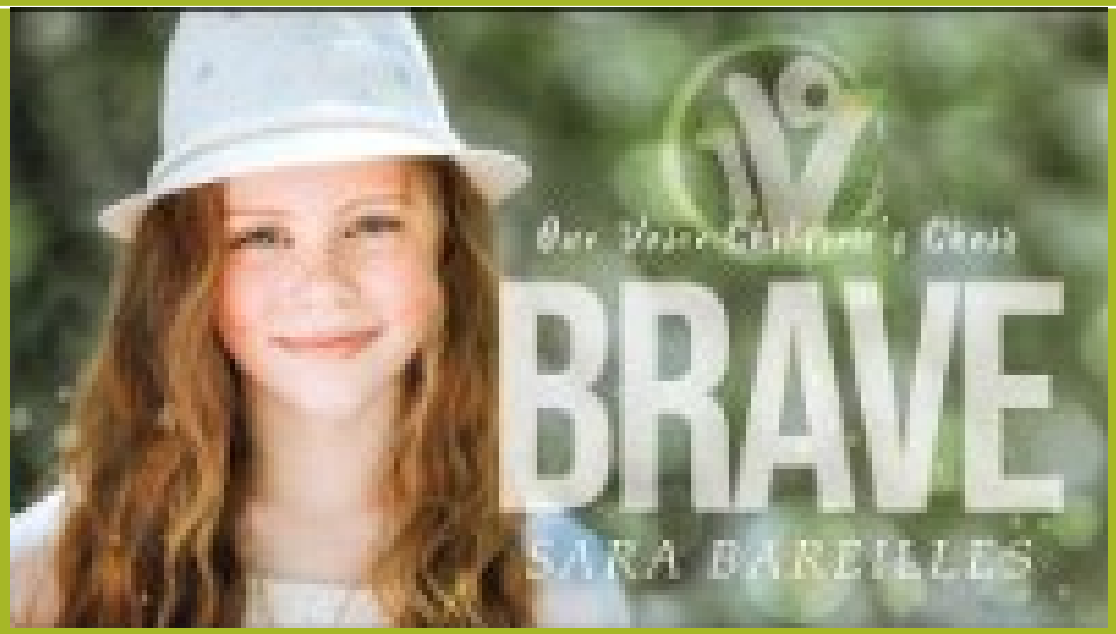
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- ☐ You should discuss with your parent/guardian
- ☐ I cannot answer this question
- ☐ I need to refer this question to school counselor and administrative personnel

REFLECT AND REVISE– LEARNING TARGETS ACTIVITY

Use the same printable sheet or writable sleeve you have already recorded your initial thoughts for Learning Target Breakout Activity 2, reflect, revise, and record new knowledge or evidence that best supports your group's summation related to your topic area. Each group member should be prepared to share an element as time and information permits. Remember the evidence you provide is part of culminating assessment for Q4 Health Education FOCUS assessed learning goals.

When/who/why should you seek help in making health-related decisions?	**How might your behaviors affect your personal health?**	**What actions can help you avoid health risks?**
How can you access valid and reliable information?	**How might your health behaviors impact your human growth and development?**	



BE BRAVE

- Being brave <u>is not</u> being the tough guy, it's being the kind guy.
- Being brave is not holding your feelings and emotions inside until you are hurting.
- Being brave is using kind and encouraging words for yourself and others.
- Growing up is challenging. Being brave includes asking questions and asking for help when needed.
- It's okay to not feel okay today, but tomorrow be brave and tell someone you trust how you are feeling.

<u>Health Connection</u>:
Listen/Watch up to 1:20. Think of 1 nice thing you can say to yourself today. Repeat that AFFIRMATION 5 times now and every day.

Module 2
Bacteria and Viruses, Health and Hygiene Habits

LIFE SKILLS ACTIVITY



Each table group will receive one of the life skill building questions below. Using your notes, discuss and record preliminary thoughts that best support your group's ideas related to your topic area. Remember to keep your work and materials as we will revisit this activity later. You will be able to reflect and revise your knowledge after content has been discussed further.

How can I demonstrate proper hygiene at home and school?	**How can I show respect for myself and my body and respect for others?**	**How can I access reliable health information, products, and services?**
How can practicing daily health behaviors reduce my potential health risks?	**How can I show good character at school and home?**	

How can I show respect for myself and my body and respect for others?

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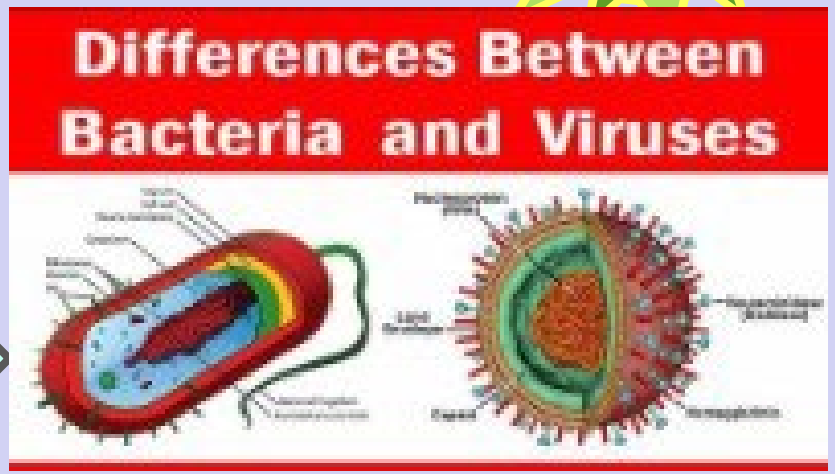
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BACTERIA AND VIRUSES' ACTIVITY

BACTERIA AND VIRUSES COMPARE AND CONTRAST

Assign each group a focus question. Then, watch the video, discuss, and report out.

5 minute video
https://youtu.be/P_9DXEnEd-Q

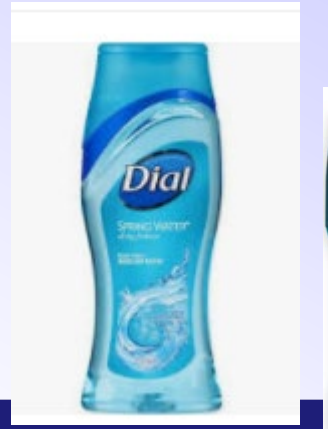


1. Draw 3 central conclusions from the video...
2. Describe some of the differences ...
3. Describe some similarities ...
4. How are they treated or cured....
5. What causes them...

Draw 3 central conclusions from the bacteria/virus video...

PERSONAL HYGIENE







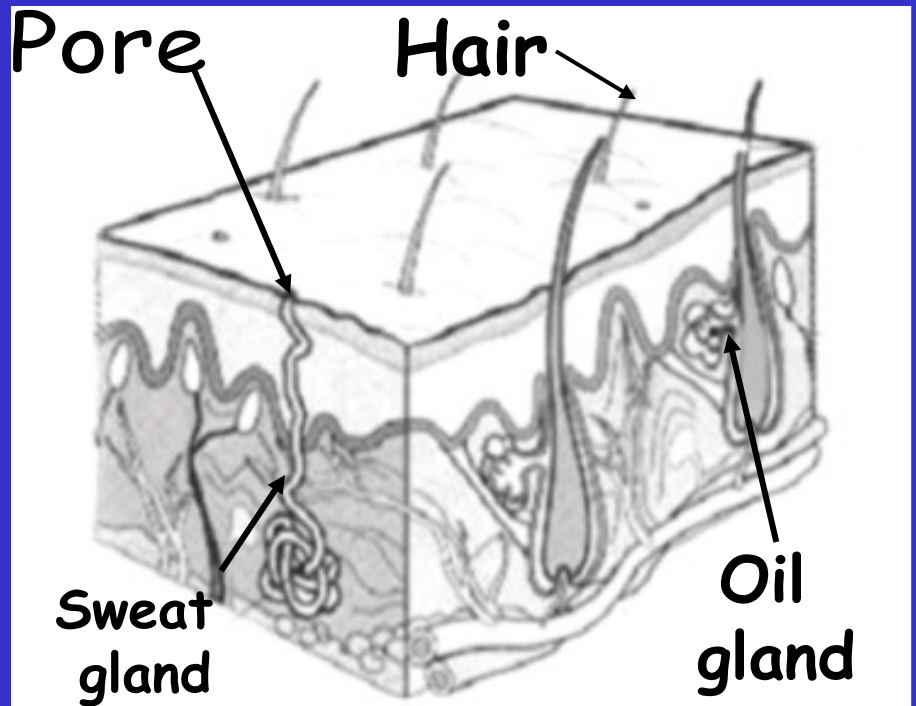


Remember:

- Bathe or shower every day.
- Washing with soap and water.
  removes perspiration and dirt as well as bacteria.
- Ask your parents or guardians about deodorant (gets rid of unpleasant odors) and antiperspirants (stops perspiration).
- Sweat glands become more active during puberty.
- Hot weather, exercise, or excitement may increase perspiration.

Oil and Sweat Don't Mix

- Oil glands (and certain sweat glands) in the skin develop quite rapidly during puberty.
- The oil glands begin producing much more oil than they did before puberty.
- The tubes leading from the glands may get clogged with dirt, bacteria, and oil, causing infection or pimples (Acne).
- If you don't have the ability to shower after sleeping or excessively sweating, be sure to wash your face with a gentle face cleanser.



A cross-section of human skin

ACNE

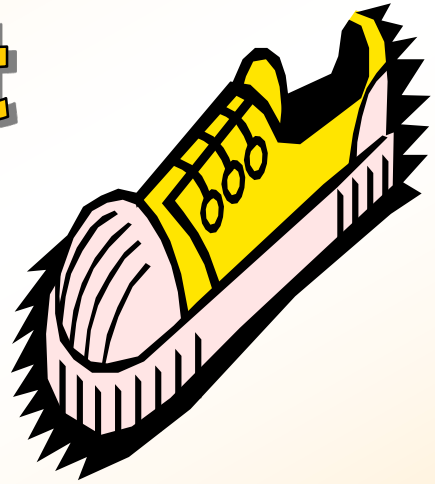
- Acne is a skin disorder in which pores are clogged with oil and germs.
- Acne is common in both boys and girls, but usually worse in boys.
- A doctor cannot cure acne but can provide special treatments to keep it under control.
- When the oil glands in your skin make too much sebum (oily substance), the oil ducts get clogged with oil and mix with germs on the skin.
- Wash your face every morning with a gentle cleanser.
- Do not touch your face; your hands have dirt and oil on them that can clog pores.







Stomp Out Smelly Feet



- Keep your feet clean and dry.
- Wear socks that absorb moisture, such as cotton socks, and wash them after use.
- Use powders or sprays designed for feet and shoes.
- When possible, give shoes a chance to air out.
- Wash sneakers and other shoes if they can be washed. Make sure they are dried properly.



What You Need to Know about Facial Hair and Shaving

- **Boys usually begin to get facial hair between the ages of 14 and 16.**
- **The first facial hairs appear near the outer corners of the upper lip.**
- **The hairs begin to fill in and grow toward the middle of the upper lip.**
- **Facial hair might change color. It may not be the same color as the hair on the head.**
- **Discuss whether or not to shave facial hair with family. You should get permission from your parents or guardians before shaving for the first time.**

Do Not Share a Razor to Shave

- Sharing razors can spread germs.
- If you shave, you might get nicks and cuts. The nicks and cuts might be so small that they cannot be seen, but blood can get on the razor.
- Blood could contain bacteria or viruses.



3 types of Razors:

- Electric (do not use near water)
- Battery-powered (may get wet)
- Blade (manual)

REMEMBER:
ALWAYS get parent's permission to shave!

HYGIENE HIGHLIGHTS

Determine 3 things that you will make priorities in your personal hygiene. Record your list in your notes or journal.

Examples:

- I will bathe thoroughly every day to reduce dirt, oils, and odor.
- **I will use deodorant to reduce odors caused by sweat and bacteria.**
- **I will limit touching my face to avoid spreading germs and clogging pores.**

MY PERSONAL HYGIENE PRIORITIES		
Health Connection:		

Health Skill: When you feel clean, you feel good. When you take the time to groom, you invest in you. Think of one thing you do in your personal hygiene that makes you feel better (Ex. Style your hair)

REFLECT AND REVISE – LIFE SKILL BUILDING ACTIVITY

You have already recorded your initial thoughts on to reflect, revise, and record new knowledge or evidence that best supports your group's summation related to your topic area. Each group member should be prepared to share an element as time and information permits. Remember the evidence you provide is part of your culminating assessment for Q4 Health Education FOCUS assessed learning goals.

How can I demonstrate proper hygiene at home and school?	**How can I show respect for myself and my body and respect for others?**	**How can I access reliable health information, products and services?**
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My question is _____

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Student Name _____ Teacher name _____

Answer: _____

_____

_____

- ☐ You should discuss with your parent/guardian
- ☐ I cannot answer this question
- ☐ I need to refer this question to school counselor and administrative personnel

Module 3:

Accessing Valid and Reliable Health Information, Products, and Services

EXPECTED LEARNING OUTCOMES

The standards can be addressed through many elements of this unit. Language Arts, Math, and Science Standards may also be reflected.

Directions: Using 5 small groups, provide one of the Learning Targets below to each group. Allow each group to brainstorm to see what they already know and then record their knowledge. They will revisit and revise their knowledge at the end of the unit after learning the critical content. Monitor and honor appropriate and meaningful responses.

By the end of this unit, the student can:

1. Explain the characteristics of valid health information, products, and services.
2. Explain when help is needed in making health-related decisions, including who to ask and why it is important to ask.
3. Explain how behavior affects personal health. Identify examples from this unit.
4. Explain how to avoid or reduce health risks and be responsible for health behaviors. Identify examples from this unit.

Determining Valid and Reliable Information

A Reliable Product/Service is something that provides a consistent, predictable experience when used or observed based on claims; quality.

Validity of a Product/Service is the state of being acceptable according to the law; well-grounded, sound, and correct based on research and test measures.

Tips for Accessing Valid and Reliable Health Information, Products, or Services:

1. Identify what information, product, or service you really need.
2. Research the health topics, products, and care providers. Review feedback and consumer reports. Printed health information should be current (no more than 5 years old).
3. Evaluate the sources of information, qualifications, reputation. Is it educational or emotional? Are their claims realistic or lofty?

Identifying Trusted Sources



.edu, .org and .gov are typically educational institutions, nonprofit organizations and government agencies that are (generally) credible.

When using .com sources, check:



- Proper use of citations or source links when they're quoting statistics/facts
- Other sources that use the same information
- The full story of the statistic.

Determining Valid and Reliable Information

Deconstructing an Advertisement

This ad:

- Is advertising antiperspirant/ deodorant but doesn't include a picture of the product. Why?
- Uses slogan, "ALL STRENGTH, NO SWEAT." Why?
- Uses a National Women's Soccer Team Player to shatter norms of not having women in football to sell a product. Why?

Reflect:

- Would you buy this product? Why or why not?
- What else can you infer from the ad?
- What else would you want to know about the product?



6 Helpful Tips for Identifying Valid and Reliable Health Information

Tip 1

Origin

From where was the source retrieved?

- For Digital: What is the domain?
  - » com, .org, .gov, .net?
- For Print: Who is the publisher?
  - » Is the source printed by a well-known publishing press, or a university press, or other?
- Is the source primary or secondary?



Tip 2



Author

Who is the author of the source?

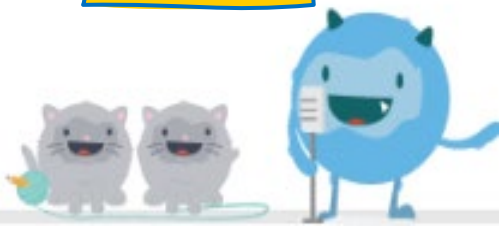
- How qualified is the author to write on this topic?
- Is the author sponsored by an organization?

Tip 3

Purpose

What is the purpose of the source?

- Who is the intended audience?
- Why was the source written?
  - » Inform? Opinion? Entertain? Persuade? Sell?



Tip 4

Perspective

From what perspective is the source written?

- What is the author's point of view?
  - » What is the tone or voice of the writing?
  - » Is the writing biased/unbiased? Does there seem to be an agenda?





Tip 5

Academic

How scholarly is the source?

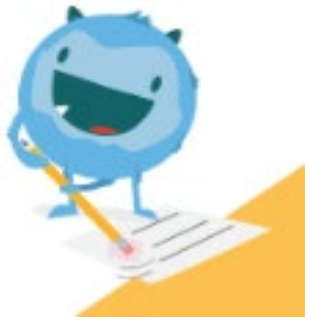
- Is the content supported by evidence?
  - » Are there references? Does the author cite credible sources?
- Is the source peer reviewed?

Tip 6

Relevance

How relevant is the source?

- When was the content published?
  - » How current is the source and/or when was it last updated?
- Does the source fit the needs of the assignment?
  - » Does the assignment require an overview, or something specific?
  - » Does the assignment require primary sources?



1



2



3



Each group will be assigned an ad. Collaborate within your group to answer the questions.

4



5



Answer the following questions to determine the validity or reliability of health products/services:

1. Who is the target audience?
2. Why are they targeting this audience?
3. How do they appeal to this audience?
4. What word(s) act as triggers for you as a consumer?
5. What did the ad leave out?
6. What characteristics of the ad can you describe?
7. What else would you want to know?
8. How do you know if the ad is valid or reliable?

Do you believe the product's claim? Yes? No? Maybe? Why? REPORT OUT

Healthful Habits For Boys Your Age



- Have regular checkups.
- Accept your body and the changes as they occur.
- Be confident and proud.
- Be kind to yourself and others during these physical and mental changes. Use positive comments or don't comment at all. Don't participate in gossip.
- Be an UPSTANDER, not a BYSTANDER… NEVER BULLY ANYONE!!!
- Do not share a razor, even if you have permission to shave.
- Bathe or shower each day.
- Wear clean underwear, socks, and athletic supporters to prevent bacteria growth and jock itch.
- Wear athletic supporters and protectors during sports.
- Avoid picking or squeezing acne.
- DO NOT USE STEROIDS OR ANY SUPPLEMENTS WITHOUT DISCUSSING WITH A DOCTOR.
- Choose responsible actions when you have mood swings.
- Avoid or reduce your risk behaviors. Determine consequences to actions and make healthy choices.

Personal Health Behaviors/Goals Activity

What are 5 personal healthy habits and/or life skills you put into action <u>every day</u> that can help you reduce your health risks?

-
-
-
-
-

List 2 Health Goals you can set to improve a health behavior and reduce a health risk.

-
-

Reflect and Revise – Learning Targets ACTIVITY

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