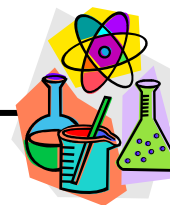


Science 10-4 Unit C: Investigating Matter and Energy in Living Systems



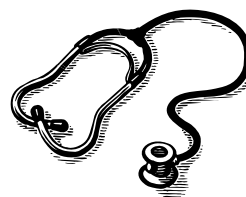
Digestive and Circulatory Disorders

Homeostasis: The maintenance of a balanced, functioning environment within the body.

1. Describe in general terms how the digestive and circulatory systems interact in a healthy human body. Think about how they help maintain a suitable, balanced environment in the body (homeostasis).
2. Investigate and describe what may happen to the body when the digestive and circulatory systems are damaged or disturbed, for example:
 - kidney failure
 - heart attack
 - appendicitis.

Diagnostic: Used to identify symptoms so that a diagnosis of the problem can be made.

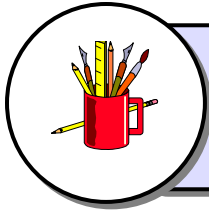
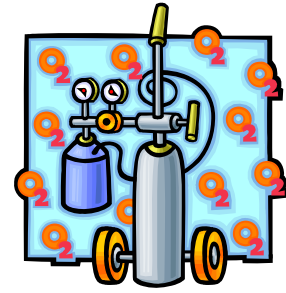
3. Investigate and describe one of the following pieces of diagnostic equipment used to diagnose symptoms of imbalances in the body:
 - endoscope
 - stethoscope
 - blood pressure monitor
 - thermometer



Explain how the device works and what types of symptoms it is used for. Share your findings with others in the class.

4. Investigate and describe one of the following pieces of equipment used to correct or improve imbalances in the body:

- kidney dialysis machine
- pacemaker
- oxygen ventilators.

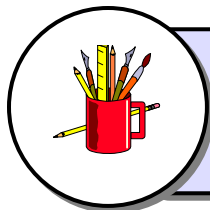


Use Tools [Note Taking III](#) and [Thinking About Form for Presentations](#).

5. Examine how poor fitness, stress levels and diet can affect the human circulatory and digestive systems; e.g., by causing:

- ulcers and acid reflux disease
- eating disorders; e.g., anorexia, bulimia
- high blood pressure and heart disease.

What can you do to keep your circulatory and digestive systems healthy? Create an action plan to ensure your good health that includes how to keep fit, deal with stress and eat a balanced diet.



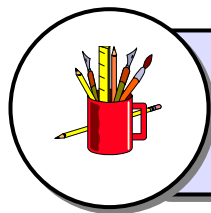
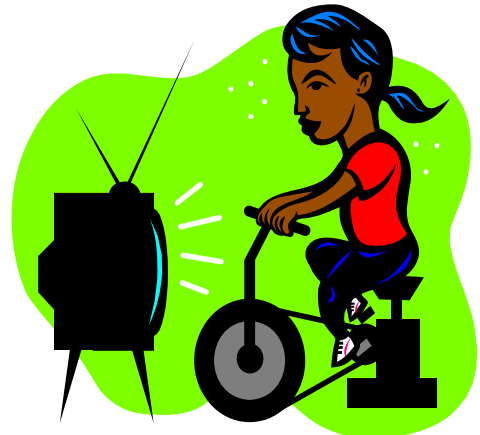
Use Tool [Action Plan](#).



6. Use a variety of sources, such as media and the Internet, to investigate social and other influences on people's behaviour that may affect their circulatory, digestive and respiratory systems.

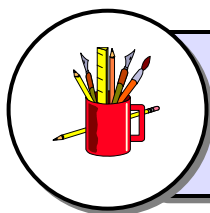
Examples:

- How do television and other advertisements influence smoking, diet and activities people become involved in?
- How do movies, television shows and magazines influence attitudes and behaviours, e.g., self-image, dieting habits.
- How does peer pressure influence behavioural choices in young people, e.g., smoking, dieting habits, self-image.



Use Tools [Preparing for an Internet Search](#), [Analyzing TV Advertising](#) and [Analyzing Paper Advertising](#).

7. Investigate a variety of careers in the health or human care sectors, e.g., home care workers, daycare workers, health care assistants. Search the ALIS Web site at www.alis.gov.ab.ca and link to OCCinfo (Occupational Profiles), conduct an interview or use other strategies to identify education requirements and skills required. Share your findings with classmates.



Use Tools [Finding Sources](#) and [Note Taking III](#).