

U4 Learning Guide

Name: _____

Using a pencil, complete the following notes as you work through the related lessons. Show ALL work as is explained in the lessons. You are required to have this package completed BEFORE you write your unit test. Do your best and ask questions if you don't understand anything!

Extreme Weather Events

1. Explain, in your own words, the difference between weather and climate.

2. List some things you think would change if your area got hotter and dryer due to global warming?

3. Could we experience a hurricane in our area? Explain your reasoning for this conclusion.

4. Do you agree or disagree with the idea that we should let wildfires burn and not expend so much effort to put them out? Explain your reasoning.

5. What conditions are the most likely to result in flooding in BC? Give an example of recent serious flooding that has occurred from those conditions.

Disaster Preparedness

Think About It

1. List the top four basic needs that you think must be met during a prolonged emergency when normal activities are severely affected?
 - a.
 - b.
 - c.
 - d.
2. What, if any, unique needs do you think teens might have in a disaster situation?
3. Think about the emergencies below and whether they could occur in your area. Sort them into the 'Possible' or 'Unlikely' categories.

Tornadoes, Earthquakes, Tsunamis, Wildfires, Landslides, Volcanic Eruptions, Home Fires, Hazardous Materials Spills, Disease Outbreaks, Extended Power Outages, Extreme Heat, Drought, Floods, Hurricanes

Possible

Unlikely

Day 1 - Outbreak

1. List 5 steps involved in **Shelter-In-Place** that would apply to you in your home.

2. Give an example of an emergency or alert currently listed on **Emergency info BC** and say where it is from.

3. What does **PreparedBC** say are potential Hazards in BC? Which two are the most likely to happen in your area?

4. If you were stuck in your home, how long would you expect to be able to communicate if the land lines and power went down? Explain.

Day 2 – What’s for Dinner?

1. Where can you get safe water from in your home besides the water faucets? (in ‘Build an Emergency Kit’ page) Where is the water not necessarily safe?

2. Which emergency kit items need to be checked and changed over time?

3. What is the difference between an evacuation alert and an evacuation order?
 - a. Alert:

 - b. Order:

Day 3 – Close Encounter

1. 'I'm well prepared, but battling enraged cannibals – that's a stretch.'

Name a situation, even though remote, you could encounter that would be difficult to prepare for - even if you had an emergency kit and a plan?

Day 4 – Evacuation Order

1. What are, to you, the five most important things to consider when a alert to evacuate has been issued?

<https://www.rdn.bc.ca/evacuations>

2. Some people in disaster situations do not want to leave their homes and they resist orders to evacuate. What are two possible reasons they could have for this attitude?

a.

b.

3. What are some problems these people could cause for emergency personnel?

Day 5 – Humans 1, Zombies 0

1. What can *Emergency Social Services* do to help people you have survived a disaster?

Agricultural Practices and Processes

Chemicals in Agriculture

1. What are three kinds of chemicals used in agriculture?
 - a.
 - b.
 - c.
2. Give an example of what, other than a chemical, organic farmers use to control pests?
3. On which four crops are the majority of chemicals in agriculture used?
 - a.
 - b.
 - c.
 - d.

Environmental Impacts of Pesticides

1. What is an important argument for and against the use of agricultural pesticides on crops?
 - a.
 - b.
2. How do pesticides spread in the environment?

Pesticide Resistance

1. Explain how pest populations can, over time, become resistant to a pesticide.

2. What are two ways ancient farmers used to control pests. (Video)

Hydroponics

1. Explain simply what hydroponics is.

2. How is the use of water in hydroponic farming an improvement over conventional farming?

3. What are two possible disadvantages of hydroponics?
 - a.
 - b.

Biofuel Crops

1. What are the two main types of biofuels and how are they manufactured?
 - a.
 - b.