

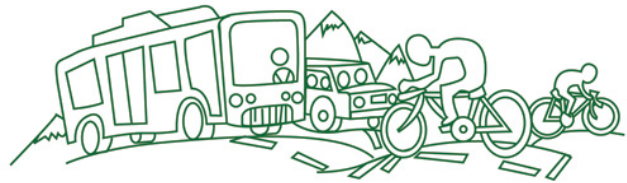
Name: _____ Course: _____ Date: _____

VALUE CONSERVATION

TRANSPORTATION

Inquiry: How does our choice in transportation methods impact our human and natural communities?

ACTION PLAN	<ol style="list-style-type: none"> 1. MY PERSPECTIVE 2. GENERAL REFLECTION 3. GLOBAL RESEARCH 4. LOCAL ACTIVITY 5. TAKING ACTION 6. CRITICAL THINKING 7. CAREER OPTIONS 8. MY PERSPECTIVE 9. PRESENTATION
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Important Instructions

1. Download Action Pack and save it onto your computer.
2. Re-open Action Pack from your computer to start working on it.
3. Make sure you are not still working in your web browser but in Adobe Reader XI.
4. **If you don't follow these instructions your work will not be saved!**

1. MY PERSPECTIVE & WORLD VIEW /5

1.1 List 4 things people need to reduce their *carbon footprint* and conserve *natural resources*.

- 1.
- 2.
- 3.
- 4.



Give your answer for each of the following questions by choosing 1 to 10:

1- Strongly Disagree 10- Strongly Agree

1.2 The Earth is like a spaceship with very limited room and resources.

1-10:

1.3 Our government should regulate the extraction of natural resources to reduce environmental and social justice impacts.

1-10:

1.4 Developing habits like turning off the lights, turning off the taps, and generally wasting less makes a difference to global **sustainability**.

1-10:

1.5 The way in which we are extracting and using oil isn't a problem because the Earth system is strong enough to cope with the impacts.

1-10:



“We must walk on this Mother Earth in a good, kind, soft and gentle way”

~War Dance, (Lawrence Perry)

Shuswap Nation

2. GENERAL TOPIC REFLECTION**/6**

Make sure you are signed into the BTCEA website and watch the lesson videos here, then answer the following questions.

2.1 Name 3 insights or facts that you gained from the lesson videos.

1.

2.

3.

3. GLOBAL RESEARCH – ACTION PACK TOPIC SPECIFIC /8

Answers to the questions below can be found in the LIBRARY OF LINKS located just below your Action Pack on the website. This information will also inform your discussion blog entry and critical thinking questions.

Research Questions

Choose any TWO of the following questions to answer – the answers can be found in the LIBRARY OF LINKS. To avoid plagiarism, your answers must be in your own words.

(Four marks each)

- 3.1 a) List the five main modes of transportation used for goods in Canada, what each mode generally transports, and why that method is used.

Did you know...?

The US used 18.83 million barrels of oil per day in 2011 and 19.18 million barrels of refined petroleum products per day in 2010.

~[Energy Information Administration](#)

- b) What are the five main modes of transportation people use to get around in Canada?

List the links you referenced:

- 3.2 List one to three ***environmental impacts*** associated with each mode of transportation listed in question 3.1a

List the links you referenced:

- 3.3 List at least 3 types of ***emissions*** that come from cars and what type of health or environmental harm they cause.

List the links you referenced:

- 3.4 In Canada, Alberta extracts bitumen (crude oil) for export to be processed and made into gasoline to fuel transportation and to make many other products. What are at least three ***environmental*** and/or ***social impacts*** of that bitumen (crude oil) extraction?

List the links you referenced:

- 3.5 List four community-based actions that people can take to reduce their ***environmental impact*** as a group.

List the links you referenced:

4. LOCAL ACTIVITY

/10



How does this global topic relate to you personally?

How often do you travel in an automobile each day? Complete the following activity and research chart to see how you are part of the equation.

- a. Record your travel in a car over the last week (i.e. Monday – Monday).
- b. Calculate the number of kilometers you travelled for each trip using [Google Maps](#).
- c. Fill in the RESEARCH CHART for each trip (see example chart below)

REMEMBER:

- Multiply # of km by 2 for a round trip.
 - If you carpoled divide # of km by # of passengers.
 - Write down the trips you took using alternate modes of travel (walk, bike, skateboard).
- d. Once you have calculated your weekly total, use the [Emissions Calculator](#) to determine your annual **carbon emissions**.

NOTE: You will need the Make, Model and Year of the vehicle you use most often to complete this calculation.

Research Chart

4.1 Complete Research Chart (use note paper if more space is needed)

<i>Where did I go?</i>	<i>#km by car (x2 if return trip)</i>	<i>Divide by # of passengers if we carpoled</i>	<i>#km traveled by alternate mode (foot, bike, bus)</i>
Example Monday: music lessons	5 km X 2 = 10km	10km	0
School	0	0	2 x 2 = 4km
Soccer game	6 km X 2 = 12km	12 km/ 3 passengers= 4	0
TOTAL	22km	14km	4km

<i>Where did I go?</i>	<i>#km by car (x2 if return trip)</i>	<i>Divide by # of passengers if we carpoled</i>	<i>#km traveled by alternate mode (foot, bike, rollerblade, etc)</i>

Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
WEEKLY TOTALS	km travelled by car this week:	km travelled divided by # people if carpooled week	Km traveled by alternate mode this week
Multiply the above number by 52 (# weeks in a year) <i>The Falcon Calculator can calculate this for you</i>			
ESTIMATED ANNUAL CO₂ EMISSIONS			

Reflections:

Which trips did you take by car that you could have used an alternate mode (walk, bike, skateboard etc) for? Brainstorm how else you could have gotten there.

By how much could you decrease your annual CO2 emissions if you took more trips this way? Play with the Emissions Calculator to find this information out.

So What?

4.2 What are some conclusions or observations you gained from this Activity?

5. TAKING ACTION

/10

Our actions make a difference in the world. Even NOT taking action is taking an action.

5.1 Complete one or more actions that are relevant to you and that you don't already do.



List of Actions

Personal Actions	1. I will walk or bike minimum of 5 km instead of taking a car this week.*
	2. I will not use a car to get around this week.*
	3. I will buy a used bike rather than a new bike.*
	4. I will research more environmentally friendly vehicle choices, such as hybrid, electric or bio-diesel vehicles.
	5. I will regularly choose activities that I can get to by walking, biking, or taking public transportation.
	6. I will learn how to fix a flat tire and other small fix ups on a bike.
Household Actions	7. I will arrange carpooling with family or friends to reduce multiple trips or single passenger trips.*
	8. I will plan with my family to use public transit or bike to get our errands done, as a way to avoid using the car.*
	9. I will talk with my family members about more fuel efficient vehicles or cars such as hybrids, electric or diesels that can run on biofuel.
	10. I will convince my family to bike or walk to get groceries or another activity rather than driving (circle which method you can choose).*
School Actions	11. I will arrange a bike to school week at my school or a bike-share program.
	12. I will help set up a car-pool program at my school.
	13. I will encourage 5 friends to bike to school with me for the week.*
Community Actions	14. I will help my friend fix their bike so they won't have to drive to a shop to get it fixed.*
	15. I will go to a rally or talked about fossil fuels and learn how to take additional action.
	16. I will join or create a local recycling project (such as Recycle-A-Bicycle) to get more community members biking.
	17. My customized and related action (teacher approved): _____

*BTCEA has measurable data on the environmental benefits of these actions.

Reflection on Taking Action

5.2 Which of the actions above did you choose to do? Why?

5.3 What was rewarding about making a commitment to action and changing your behaviour?

5.4 What was challenging?

6. CRITICAL THINKING

/10

Global **sustainability** issues are complex, and considering different points of view can give us a stronger understanding in order to change for the better.



Critical Reflections

Choose TWO of the following questions to answer. To avoid plagiarism, write your answers IN YOUR OWN WORDS.

(Five marks each)

6.1 Suggest three transportation alternatives or strategies that you think would be best to help you and your community reduce some of the **environmental impacts**. Briefly describe why you chose each alternative, what would need to happen for this to be successful in your community, and some of the potential challenges you may be faced with when putting these changes into practice. Fill out the table below.

<i>Transportation Alternative & Why</i>	<i>What would need to happen in my community/city to make this doable?</i>	<i>Potential Challenges we may face?</i>

6.4 What would the costs and the benefits be if I was to change my habits and seek alternate modes of transportation? Consider personal, **environmental, social,** and **economic impacts**.

<i>Costs</i>	<i>Benefits</i>

6.3 **STAKEHOLDERS** are individuals or groups (companies, communities, etc) who have concerns or could be impacted by an issue. Below is a list of **stakeholders** and **environments** that could be impacted if we do not reduce our use of fossil-fueled transportation. Write down two or three benefits or concerns for each stakeholder(s).

Stakeholder(s) / Environments	Impacts: Benefits & Concerns
1. Myself, my family & my community	
2. The natural world (animals, plants, ecosystems and planetary life-support systems)	
3. Companies that produce, sell and buy cars	
4. People and companies that produce, distribute and sell oil products	
5. Government	
6. Indigenous Communities (local or global, consider their land, livelihood, etc)*	

**There are one or more examples of indigenous communities that are or have been stakeholders in this topic in your Library of Links to help provide a more informed answer.*

7. CAREER OPTIONS

/6

Please reference the RELATED CAREERS link here, or in the FURTHER EXPLORATIONS section of your Action Pack webpage, to help you answer the questions below. Please feel free to do your own research for this section as well.

(Two marks each)

7.1 The job that I am interested in, that is associated with this topic is:

Because...

7.2 What training, education, and/or experience may I need to get this job and where could I get this training/experience?

7.3 List 2 opportunities and/or challenges that you think may be associated with this employment.

8. MY PERSPECTIVE & WORLD VIEW

/5

As we gather more information and hear different perspectives, our values can shift and our world view can evolve. Please do this survey again after completing your ACTION PACK to see if your 'world view' has changed in this learning experience.

8.1 List 4 things people need to reduce their **carbon footprint** and conserve **natural resources**.

1.

2.

3.

4.



Give your answer for each of the following questions by choosing 1 to 10:

1- Strongly Disagree 10- Strongly Agree

8.2 The Earth is like a spaceship with very limited room and resources.

1-10:

8.3 Our government should regulate the extraction of **natural resources** to reduce **environmental** and social justice **impacts**.

1-10:

8.4 Developing habits like turning off the lights, turning off the taps, and generally wasting less makes a difference to global **sustainability**.

1-10:

8.5 The way in which we are extracting and using oil isn't a problem because the Earth system is strong enough to cope with the impacts.

1-10:

9. PRESENTING YOUR EXPERIENCE AND KNOWLEDGE

/10

Now that you have fully explored this topic, let's share our experience with others and learn from their experiences too. Your final Action Pack assignment is to participate in the online discussion, sharing what you have learned from your Action Pack and commenting on two other posts.



***For VLN students, this will be part of your overall Discussion mark, and not out of 10.*

Title this Discussion in the following way: 'VALUE - Your Action Pack - Your Name'; for example: HEALTH – Preservatives – Sue Smith.

Please include the following in your Discussion Blog:

- What you found interesting or surprising in this process and research.
- Insights from the Activity you did, including 2-3 important things that you learned.
- What *Be The Change* Actions you are taking (or have already started doing).
- Some personal, environmental and social implications that this Action Pack brought forward.

Comment on two others posts, including:

- Any ideas or insights this post inspired in you.
- What actions you already do or are interested in starting to do regarding that topic (you can go into that Action Pack if you don't have ideas on what related actions would be).