

Why? (Breakfast at Binoy's)

Subject/Grade Level: Grade 7

Title: Why? (Breakfast at Binoy's)

Learning Competency: Understanding different kinds of energy and its vital role in human activities.

KCH Learner Value: Setting right priorities in life

Obedience

Hospitality

Maternal love

Critical Issue: Putting value on one's health over other material things.

I.Objectives

At the end of the session, the learner/s must:

- a. Understand the concept and the kinds of energy.
- b. Identify the different types of energy.
- c. Know the application of the types of energy in human activities.
- d. Understand the process of energy transformation and how it affects us.
- e. Learn to prioritize the learners activities and needs according to its importance.

II.Essential Understanding

Listening ability is necessary in order to understand the lessons in a practical way. Without it learners will not be able to learn from the lesson such as setting right priorities and also, by taking the advices from the elders(such as what was viewed from the video) which will deem the whole point of the lesson void and useless.

III.Essential Question

1. Why do we need to prioritize our actions/needs/wants?
2. How do we prioritize things in life?

IV.Summary of the Episode

Binoy is a student who does not want to eat breakfast and would prefer to walk rather than ride a public vehicle to go to school. He was doing this because he was saving for a brick game while starving himself. Food consumption is an application of energy. Binoy then had experienced the bad effects of skipping meals and the effect of his faulty decisions because of having wrong priorities.

V.Pre-Viewing (Motivation)

Before playing the video the facilitator will ask the student a list of 15 things he/she want or need

VI.Viewing Proper

The facilitator would ask the learners to focus on the topic energy and its side story of prioritizing food over brick game..

Why? (Breakfast at Binoy's)

VII.Post Viewing

1. Questions (re the episode)

Ask the students about the episode

1. What can you say about the main character? Why so?
2. What was the problem of the main character?
3. How did the main character cope up with the problem?

2. Review Question (re the content)/

Ask the students about?

1. What is/are the moral lessons that can be deduce from the story?
2. Why do we need to prioritize?
3. How could you apply the lesson learned in this video n everyday life? Give examples.

3. Groupwork

After explaining and debriefing the students about energy and the types the next step would be:

1. Group them into three groups.
2. Ask the students to look at the their list that they wrote awhile ago.
3. Ask them to compile the list as a group
4. Let them rank it according to importance 1 the highest and 15 the lowest
5. Let them explain their answers.
6. Beside the list, let the learners write what type of energy could be used in order for it to be achieved.

VIII. Synthesis and Valuing

Discuss the different types of energy by asking each student to give an example for each of the different energy.

IX. Assignment

Give a take home test to assess how much they have learned about the different types of energy

Puberty

Subject/Grade level:	Science Grade 5
Title:	Puberty
Competency:	Changes in Puberty
KCh Learner Values:	I am Empowered
Critical Issue:	Health

I. Objectives:

At the end of the session, students should be able to:

- define what puberty is
- describe changes associated with puberty
- identify the reproductive organs in males and females and explain how fertilization occur
- identify ways on how they could take care of their bodies while undergoing puberty

II. Essential Understanding

- Puberty is the stage of life in which the reproductive system matures, and secondary sex characteristics appear.
- Puberty is a normal and natural process which usually starts at the age of 10 and ends around the age of 16.
- Everyone changes at his/her own rate.
- A person can talk to an adult whom they trust regarding puberty whenever they experience or encounter information confusing to them.

III. Essential Questions

- Why do changes happen to a person's body when he/she reaches puberty?
- How should one take care of himself/herself during puberty?
- Who can they talk to when they have questions regarding puberty?

IV. Summary of the Episode

This episode describes what changes adolescents may expect when they reach puberty. It differentiates the changes that occur in males and females, emphasizing that all of these transformations are normal and natural.

V. Pre-viewing (Motivation)

1. Group the class into five groups. Make sure that there are boys and girls in each group.
2. Each group will make a short skit about one of the following:
 - What it feels like when a girl gets her period for the first time.
 - How it feels to have a bad facial blemish right before a big social event.
 - How a boy feels when his voice cracks while delivering a talk
 - What it feels like as awareness of the opposite sex increases
 - How a girl feels when he can't go to a swimming party because she has her period.
3. A situation is assigned to a group through draw lots.
4. Each skit should not be longer than 2 minutes.
5. After the presentations, tell the students that these situations are applicable mainly to their age group because of Puberty. The video they are about to view will explain further what is puberty and how it affects them.

VI. Viewing proper

- **Why?** (Grade 5 - Science)
"Puberty"

VII. Post viewing

1. Questions (re the episode)
 - a. What was the program about?
2. Questions (re content)

- a. What is puberty? Why does it happen?
- b. At what age does puberty usually happen?
- c. What happens when a person reaches puberty?
- d. What are the reproductive organs for males and females? How does fertilization occur?

VIII.Synthesis and Valuing

To end the session, ask the following:

1. What is the greatest benefit of reaching physical adulthood?
2. Do you have better appreciation now of what members of the opposite sex are experiencing?

IX. Homework

For their assignment, give the students the following activity:

Think of a way on how they can show a better appreciation of what the opposite sex are experiencing. Write it down on a piece of paper.

First Blood

Subject/Grade Level:	<i>Science - Grade 6</i>
Title:	<i>First Blood</i>
Competency:	<i>The Circulatory System</i>
KCh Learner Values:	<i>Responsible</i> <i>I must take good care of myself.</i>
Critical Issue:	<i>Taking care of the circulatory system.</i>

I. Objectives

At the end of the session, students should be able to:

- Describe the function of the circulatory system.
- Discuss the different parts of the circulatory system.
- Identify the function of each part of the circulatory system.

- List ways on how to take good care of the heart.
- List causes of a heart malfunction.

II. Essential Understanding

- The circulatory system is the main transport system of the body and is responsible for supplying cells with food and oxygen needed for survival. It also carries away waste products from cells that must be eliminated from the body.
- The heart, blood and blood vessels make up our circulatory system.
- It is very important to take good care of our circulatory system.

III. Essential Questions

- What is the function of the circulatory system?
- The circulatory system is a very important system in our body. How will the malfunctioning of one of its parts affects us?
- What are ways to keep the heart healthy?

IV. Summary of the Episode

This episode is about the circulatory system. It will discuss its function, its different components, and its importance. It will also cover some ways on how we can take good care of our heart.

V. Pre-Viewing (Motivation)

1. Ask pupils to press two fingers against their neck and to say what they feel.
 - a. (Responses could be a steady pumping / beating). Ask them to count the number
 - b. of pulses they feel during 10 seconds.
2. Now ask pupils to stand up and run on the spot until you reach a count of 20.
3. Ask pupils to put their fingers against their neck again and to count the number
 - a. of pulses they feel during 10 seconds.
4. Ask them to suggest why they have a higher count the second time. Lead the
 - a. discussion to the understanding that the blood is being pumped around the body
 - b. faster so that the lungs can get more oxygen which we need to breathe.

VI. Viewing Proper

- **Why?**
“First Blood”

VII. Post Viewing

1. Questions (re: the episode)

- Did you like the program? Why or why not?
- What was the program about?
- Can you relate to the video you have watched?

2. Review Questions (re: content)

- According to the video, what are the main parts of the circulatory system?
- Which part of the circulatory system pumps blood in the different parts of the body?
- What is the size of the heart? What is it made up of?
- Which part of the circulatory system carries oxygen and nutrients?
- Can you remember the parts of the blood vessels? Give the function of each part.
- Why is it important to treat injuries at hand?
- What causes the heart to malfunction?
- According to the video, how can we keep our heart healthy?

3. Deepening

- What are your own ways of keeping your heart healthy?
- What do you think is the importance of having a healthy heart?
- Do you know anyone who has a heart problem? What do you think are the causes of this?

4. Group Work/ Activity:

- Making an improvised stethoscope

Materials needed:

small disposable plastic cup
60 cm long plastic tubing
6 inch square thin plastic sheet
rubber band
pencil

Procedure:

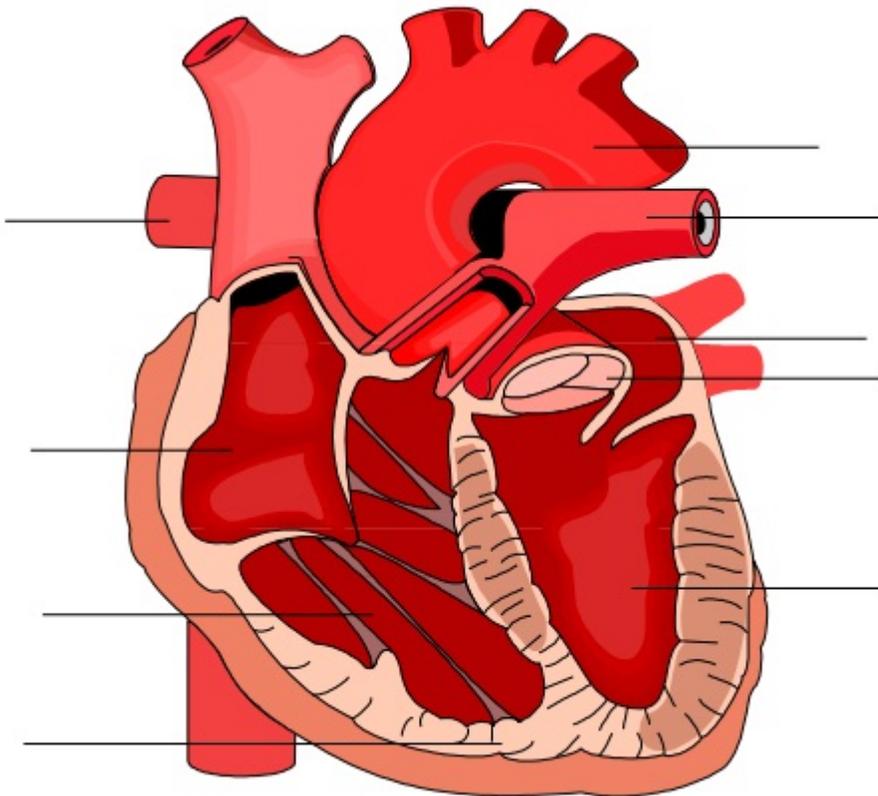
1. Punch a small hole at the bottom of the plastic cup using the point of a pencil.
2. Push the end of the plastic tube through the hole.

3. Put plastic sheet over the open end of the cup.
4. Hold it in place with a rubber band.

- Naming the parts of the heart

Directions: Use the terms in the box to label the diagram of the heart.

Aorta	Pulmonary Artery to Left Lung	Septum
Right Atrium	Pulmonary Artery to Right Lung	Semilunar Valve
Left Atrium	Right Ventricle	Left Ventricle



VIII. Synthesis and Valuing

To end the session, ask the following:

1. As a student, what can you do to help others reduce the risk of having heart problems?
2. Why is it important to take a rest?
3. The heart is the center of our circulatory system. Discuss the importance of having a healthy heart to the students.

- The heart is vitally responsible for about everything that gives our body life ranging from the transportation of oxygen to the success of your immune system. Having a balanced diet, exercise and being responsible in your activities can have a good effect in the health of your heart and the many other tissues that make up your circulatory system.

Source: <http://www.livestrong.com/article/428996-importance-of-heart-health/>

IX. Homework

For their homework, give the students this activity:

- Using any material they choose, have students create a basic model of the heart. Encourage students to be creative. Students will need to identify and label the Right Atrium, Left Atrium, Right Ventricle, Left Ventricle, Pulmonary Artery, Pulmonary Vein, and Aorta. Have students return their homework and evaluate whether or not the students created and identified each portion of the heart.

SOURCE: http://www.healerwithin.org/IMLS/Gr6_circulatory.pdf

Fixing a Leak

Subject/Grade Level:	Grade 6
Title:	<i>Fixing a Leak</i>
Competency:	Familiarity with the basic parts and functions of the circulatory system
KCh Learner Values:	I am Responsible
Critical issue:	Taking care of one's health

I. Objectives

At the end of the session, the students should be able to:

- recall the parts of the circulatory system;
- identify the four parts of the heart;
- identify the two kinds of blood circulation;
- differentiate the two kinds of blood circulation;
- state at least two practices or activities which are good for their health.

II. Essential Understanding

- The **circulatory system** delivers oxygen and nutrients to different parts of the body. It also delivers carbon dioxide and other waste products to organs that will dispose them.
- It is made up of:
 - heart
 - blood
 - arteries
 - veins
 - capillaries
- The **heart** is a big muscle divided into four chambers:
 - left atrium
 - right atrium
 - left ventricle
 - right ventricle
- **One-way valves** separate the atria from the ventricles.
- The blood circulation has two parts:
 - **pulmonary circulation** - blood carrying carbon dioxide returns from other parts of the body, enters the heart, then proceeds to the lungs
 - pulmonary veins -> right atrium -> one-way valve -> right ventricle -> pulmonary artery -> lungs
 - The **lungs** take away the carbon dioxide and refreshes the blood with oxygen.
 - **systemic circulation** - Oxygenated blood will be distributed to different parts of the body
 - pulmonary veins -> left atrium -> one-way valve -> left ventricle -> aorta -> different parts of the body
 - **Aorta** is the largest artery in the body.
- Oxygen-rich red blood cells pass through a network of blood vessels called **arteries**, which further branch out into **capillaries**.
- Red blood cells complete one whole journey in **20 seconds**.
- A red blood cell takes **250, 000 trips** around the body during its **four-month life span** to **nourish 60 trillion body cells**.
- **Numbness** is caused when the blood supply to a certain part of the body is cut off.
- The brain can last only **five minutes** without oxygen.
 - Unlike other body cells, brain cells cannot be replaced.
 - **Stroke** - caused by loss of blood supply in the brain and one of the leading causes of death
- Take care of your circulatory system by:
 - maintaining a healthy diet
 - exercising

III. Essential Questions

1. What is the circulatory system?
2. What are its parts?
3. What are the two kinds of circulations?
4. How does one stay healthy?

IV. Summary of the Episode

This episode identifies the parts of the circulatory system, the parts of the heart, and the path of red blood cells through the circulatory system. It shows the path of red blood cells in both the

pulmonary and systemic circulations. It also presents some interesting facts related to the circulatory system and how to keep this system healthy.

V. Pre-Viewing (Motivation)

1. Ask the students to place their right hand over their chest to feel their heartbeat.
2. Lead the students in a variety of simple, heartbeat-elevating exercises such as:
 - a. jumping jacks (at least 10)
 - b. jogging in place (32 counts)
3. Cool down with a breathing exercise (inhale, exhale) then ask the students to put their hand over their chests.
4. Ask the following questions:
 - a. Did your heartbeat change? Is it faster or slower?
 - b. Has your breathing changed? Is it faster or slower?
 - c. Why do you think they changed?

VI. Viewing Proper

Why: Fixing a Leak

Duration: 10 minutes 31 seconds

VII. Post Viewing

1. Questions (re: the episode)
 - a. Did you like the program? Why or why not?
 - b. What was the program about?
2. Review Questions (re: content)
 - a. What is the function of the circulatory system?
 - b. What are the parts of the circulatory system? The heart?
 - c. What happens during the pulmonary circulation? How about the systemic circulation?
 - d. What happens when the blood supply is cut off from a certain body part? What if the brain's blood supply was cut off?
3. Deepening
 - a. Is staying healthy important? Why or why not?
 - b. Do you think you are living a healthy lifestyle? Why or why not?
 - c. Cite instances when you did something that you think is bad for your health.
 - d. Cite instances when you did something that you think is good for your health.
 - e. What other activities can you think of doing to stay healthy?
4. Group Work
 - a. Ask the class to form groups with 4-5 members each.

- b. Each group should create a simple but creative poster promoting good health. Their poster must include the following information:
- parts of the circulatory system
 - the purpose of the circulatory system (what it does for the body)
 - the importance of staying healthy
 - activities or practices which are good for the health
- c. Ask the groups to put up their posters in the classroom or (if possible) in the hallways.

VIII. Synthesis and Valuing

To end the session, review the class about the following:

1. The circulatory system keeps the body alive by supplying oxygen to all its parts.
2. There are two kinds of blood circulation:
 - pulmonary - blood goes to the lungs to be refreshed with oxygen
 - systemic - blood travels from the heart to distribute oxygen to different parts of the body
3. Take care of your circulatory system by maintaining a healthy diet and exercising.

IX. Homework

On a piece of paper or in their notebook, ask the students to evaluate their lifestyle by listing (as many as they could) healthy and unhealthy practices that they do. Are their practices good or bad for their health? Ask them to make at least one simple yet doable resolution on how they can strive to live a healthier life.

Lady Bug Picnic: Feeding Inter-relationships among Living Things

Subject/Grade Level: *Grade 6 Science*

Title: *Lady Bug Picnic: Feeding Inter-relationships among Living Things*

Competency: *To know the importance of Food Chain and Food Web*

K Ch Learner Values: *Innovative and Resourceful*

Critical Issues: *Human responsibility in maintaining the balance in nature*

I. Objectives

At the end of the session, students should be able to:

- understand the inter-relationship of living things in our environment
- understand the concept of food chain and the food web
- identify the four types of consumers
- differentiate consumers and feeders & prey and predators
- analyze the role of human in the inter-relationship of organisms.

II. Essential Understanding

- Living organisms find food through feeding inter-relationships by constructing food chains and the food web
- Human intervention can disrupt our nature's own way of existing
- There are many ways we can make good use of our natural resources
- Every organism in the food chain has its own important role in making a balance in nature

III. Essential Question

- Why do living things need to survive in the food web?
- How do the living organisms interact with each other?
- How can people make good use of our natural resources?
- What can people do to maintain good balance in our nature and the food web?

IV. Summary of the Episode

Nelia is using her expensive pesticides to eliminate the pests invading her vegetable bed when Ida comes for a visit. Nelia complains about achids ruining her plants. After Ida explains about the food chain and food web, Nelia thinks of a way to use the food web to help her eliminate the achids and help her save money. With the help of her little brother, Kris, they were able to identify which of the bugs he caught could help her keep the plants safe from the pests. They found out that lady bugs are the most efficient in getting rid of aphids that ruin her plants.

V. Pre-Viewing (Motivation)

Before the students watch the episode, let them list down all of their food intake within the past three days. They should list it down according to the categories: VEGETABLE, FRUITS AND ANIMAL PRODUCTS.

VI.

Viewing

Proper

- WHY? (Grade 6 - Intermediate Science)

Lady Bug Picnic

Before the video starts, instruct the student to take down notes of the organisms that will be present in the video and the role of each in the food chain.

VII.

Post

Viewing

1. Questions (re the episode)

- Did you like the episode? Why or why not?
- What was the program about?

2. Review Question (re the content)

- What is the difference between food chains and the food web?
- What is the order of the consuming process within the food chains and the food web?
- What did they do to solve the problem of having pests?

3. Group Activity

- Divide the class into groups with 6 members each. The groups must be able to present a food chain. Each member should have its own role in the food chain. They must be able to role play how food chain is done in a creative manner.

VIII.

Synthesis

and

Valuing

- After the video presentation, ask them if they can apply the process of the energy transfer (just like how Nelia did explain her relationship towards the buyers of her vegetable) to their every day lives.

What are the importance of letting the organisms feed on their prey without intervening? Inter-relationship among these organisms are very much important to maintain the balance of how nature works.

Our environment is designed to cope up and to maintain balance in nature.

The teacher can further discuss how human intervention can worsen the balance of nature.

IX.

Assignment

For closing the activity, let the students go outside and explore the school garden or anywhere that “food chain” may be present. They should take notes and write down how

does a “food chain” works. Identify the producers up to the decomposers. Present and explain it to the class.

Hope for the Waters

Subject/Grade level:	<i>Grade 6 - Science</i>
Title:	<i>Hope for the Waters</i>
Competency:	Preserving the Environment
KCh Learner Values:	I belong to a community
Critical Issue:	Restoration of the Philippine Waters

I. Objectives

By the end of the session, students should be able to:

- Identify what are the different factors that contribute to the destruction of coral reefs
- Identify how these factors destroy the coral reefs
- Realize that the destruction of coral reefs bring negative consequences both to man and nature
- Think of ways how to take care of the coral reefs

II. Essential Understanding

- Humans have damaged the coral reefs
- Humans must learn to eventually change to benefit and help reduce the harm in the coral reefs
- Humans are harming the water ecosystem and need to do what is necessary to help the ecosystem. Not destroy it.

III. Essential Questions

- What is dynamite fishing?
- How does dynamite fishing destroy the coral reefs?
- What are the other ways humans destroy the coral reefs?
- What are the safer ways of fishing?
- How can we take care of the coral reefs?

IV. Summary of the Episode

The video shows the story of Ate Ida and Boy who discovers a stale fish on the shore. they soon find out that the fish was a victim of dynamite fishing. Ate Ida and Boy tried to figure out the source and reason behind the barrio's problem. The video tells us also of other ways that humans destroy coral reefs like muro-ami, cyanide fishing, and trawling. The video then shows what happens if we continue these practices and how these can be prevented. Also the video shows about the different alternatives that are safer to use.

V. Pre-Viewing (Motivation)

Flash Card Activity:

- 1) Teacher will flash numerous picture cards of the species in the ocean in relation to the video
(i.e. Coral Reefs, Fish, Whale, Plastic in the ocean etc...)
- 2) Teacher will then ask the students what is being presented on the flash cards
- 3) Afterwards, the teacher will ask, "How do you feel about our ocean life slowly dying?"
- 4) Teacher then says, "Now let's take a look at the video to learn a little more."

VI. Viewing Proper

- **WHY?** (Grade 6- Science)
"Hope for the Waters"

VII. Post-Viewing

1. **Questions** (regarding the episode)
 - a. Did you like the program? Why or why not?
 - b. What was the program about?
2. **Review Questions** (regarding the content)
 - a. What is the video about?
 - b. What is dynamite fishing?
 - c. What are the other ways that humans harm the environment?
 - d. What might happen if humans still continue this bad practices?
 - e. What are the other ways to fish safely?
 - f. How can we take care of our coral reefs?

VIII. Synthesis and Valuing

To end the session, ask the following:

1. How does illegal fishing methods destroy the ocean and its inhabitants?
2. What will happen if the ocean and the marine life in it are harmed?
3. What are the other ways of fishing without harming the ocean?
4. What can you do to help preserve the ocean?

IX. Homework (Reflection Paper)

To Help the Waters

Name: _____

Date: _____

* In 500 - 750 words, reflect on the video and state what you will personally do to help save our ocean life.

Things to consider when writing:

What did you like about the video? What are some alarming facts? What can one person do to help the water? How will you influence others to follow you?

* Submit online through the teacher's email.

Why? (My Aching Heart)

Subject/Grade Level: Science/ Grade 5

Title: Why? (My Aching Heart)

Learning Competency: Understand the Circulatory System and its relevance with good health

KCH Learner Value: Being healthy

Critical Issue: Putting importance on one's health

I.Objectives

1. To understand our Circulatory System
2. To know how eating right or wrong food will affect our health
3. To be aware of the foods with high and low cholesterol
4. To apply the information learned to one's health

II.Essential Understanding

Too much of anything good is also bad. Protein rich food gives us enough energy to start our day, but too much of it could lead to serious ailments.

III. Essential Question

1. Why do we need to be mindful of what we are eating?
2. How does our Circulatory System work?

IV. Summary of the Episode

If we don't watch what we eat, especially food with high cholesterol then there may be a big possibility of a heart attack. With proper diet and avoiding cigarettes we can avoid such possibilities. Prevention is always better than cure.

V. Pre-Viewing (Motivation)

Ask the learners if they have any relatives that had mild to severe heart attack. Then tell them if they know the reason behind it. Tell them that this video will answer that question.

VI. Viewing Proper

Why? My Aching Heart

VII. Post Viewing

1. Questions (re the episode)

1. Who are the characters?
2. What is the main problem about?
3. How did they solve it?

Groupwork

I. Make a step by step list of how the circulatory system works.

Jumble the order

Let the learners arrange it

VIII. Synthesis and Valuing

Ask them about heart attack just to follow up if they got the gist of it

IX. Assignment

Let them make a list of to-do to prevent heart attack

Boy Cactus: Plant Defense

Subject/Grade Level: *Grade 6 Science*

Title: *Boy Cactus: Plant Defense*

Competency: *To identify the structures and characteristics of plants that protect them*

K Ch Learner Values: *Reflective and Driven*

Critical Issues: *Living things have their natural way of protecting themselves from harm*

I. Objectives

At the end of the session, students should be able to:

- understand that plants, like humans, also need protection
- know that different plants have different strategies to protect themselves from harm
- identify the plants' different defenses against harm
- classify plants according to their defense mechanisms
- value the importance of friendship
- know the scientific process

II.

Essential

Understanding

- For plants cannot move around just like how humans do, plants have natural ways of protecting themselves from animals and humans.
- Different plants has different defense mechanisms (e.g. thorns, spines, thick roots, foul smell among others)
- It is good to know and be aware of the different plants' defense mechanisms for we should learn how to live with other organisms and thus, creating a balance with nature.

III. Essential Question

- Why do plants need to protect themselves?

IV. Summary

of

the

Episode

Ate Ida came to Ogie's farm and wondered what the boxes and thick cartons lying on the floor were for. When she sensed Ogie's arrival, she secretly hid. She saw him wearing the boxes and cartons to make him look like a tree.

When she asked him why but she didn't believe the reason he gave her so she followed him to school. There, she discovered that Ogie was being bullied by Ute and his gang. It turned out that Ogie studied the plants and trees and learned that they protect themselves in many

ways. And since the thick cartons resembled the bark of a tree, he used those as paddings to protect himself from bruises and cuts.

Ate Ida then told him about the defenses against enemies that plants use. Ogie then came up with idea to be a cactus (using unharmful spikes) the next time he went to school in order to scare Ute and his gang away. But it didn't work because even though Ute and his gang couldn't touch him, they instead threw things at him until Ate Ida, who secretly followed Ogie again, appeared to stop the fight.

Ogie then decided to rub foul smell against his body the next day to repel the bullies away. But Ate Ida discouraged him and made him realize that not only the bullies would avoid him but also all of his classmates and teachers. So Ogie decided to be just himself and would be a good friend to the bullies.

One day, Ogie was bringing his vegetables when he came across the bullies. They spilled his vegetables to the ground making Ogie mad. He then pushed Ute to the ground and asked for a fight but Ute couldn't fight back.

When he told Ate Ida about this incident, Ute suddenly came with a basket of fresh vegetables as a peace offering. Ogie accepted his apology and they decided to be friends from now on.

V.Pre-Viewing (Motivation)

Before the students watch the episode, let them explore the school garden and have them draw the different plants and trees that they wish to have in their own yard.

VI.Viewing Proper

- WHY? (Grade 6 Science)

Boy Cactus

Before the video starts, instruct the student to take down notes of the plants that will be present in the video and its different ways of protecting themselves against harm and their enemies.

VII.Post Viewing

1. Questions (re the episode)

- Did you like the episode? Why or why not?
- What was the program about?

2. Review Question (re the content)

- What are the different ways a plant can protect itself?
- What were the plants that Ogie copied to protect his self?
- How did Ogie come up with the idea of using thick cartons?
- What are the five steps in the Scientific Process?

- What did Ogie do to bring back his friendship with Ute?

3. Group Activity

- Divide the class into groups with 6 members each. Each group must conceptualize a situation in where there is plant that will be eaten by an animal or humans, thus will show that certain plant's defense mechanism. They will do it in a roleplaying manner.

VIII. Synthesis and Valuing

- Is it fair for plants to have special Defense Mechanisms and Humans do not have?
- What are the activities made by Humans that can be harmful to plants?
- Do you think there is a need for us people to take part with the caring and preserving the plants that extinct or highly damaged?

IX. Assignment

For closing the activity, let the students make a reflection essays with the guide question, "How can you protect yourself from harm?". In this way, they will reflect their own self as to how plants do protect themselves from harm.

WHY?, "SagipinNatinangKagubatan"

Subject/Grade Level:	<i>Science, Grade 6</i>
Title:	<i>WHY?, "SagipinNatinangKagubatan"</i>
Competency:	<i>Importance of the forest.</i>
KCh Learner Values:	<i>Proactive: I am a proactive forest watchdog</i>
Critical Issue:	<i>Environment</i>

I. Objectives

At the end of the session, students should be able to:

- Identify the consequences of illegal logging.
- Describe how the water cycle works.
- Name the benefits of preserving forests.
- Recognize the importance of reporting illegal logging to authorities.

II. Essential Understanding

- Forests help prevent landslides caused by soil erosion. The roots of trees keep the soil in place so they aren't washed away by heavy rains.
- Forests are a source of food, medicine, raw materials, and other useful products.
- Forests serve as the natural habitat of various plants and animals.
- Trees are the world's primary source of oxygen.

III. Essential Questions

- What would happen if all the trees in a forest were cut down?
- What catastrophic event took place in Ormoc, Leyte? What happened to the people?
- What were the combined factors that led to the Ormoc tragedy?
- How do trees prevent soil erosion?

IV. Summary of the Episode

This episode explains the importance of the forest and how illegal logging activities affect the environment and people.

V. Pre-viewing (Motivation)

1. Group Activity

Have the students form groups of 5. Provide each group a copy of the word hunt activity sheet. Each group is given 5 minutes to find as many of the listed words as they can and complete the activity.

2. Activity Discussion

- Do you think the items in our word hunt activity have anything in common? How are they related? What are all these items made from?

3. Motive question

- Are trees only useful for making products such as those we discussed? Let's watch the video to learn more about why trees, especially forests, are very important to us.

VI. Viewing Proper

- **WHY?** (Grade 6 - Science)
“SagipinNatinangKagubatan”
Play time: 13 mins. 40 sec.

VII. Post Viewing

1. Episode discussion

- What did Ida do after finding out about the illegal loggers? Did it stop the practice from continuing? Why or why not?
- Why did MangElmar choose to become an illegal logger?
- What made MangElmar stop working as an illegal logger? Why do you think it happened?

2. Lesson discussion

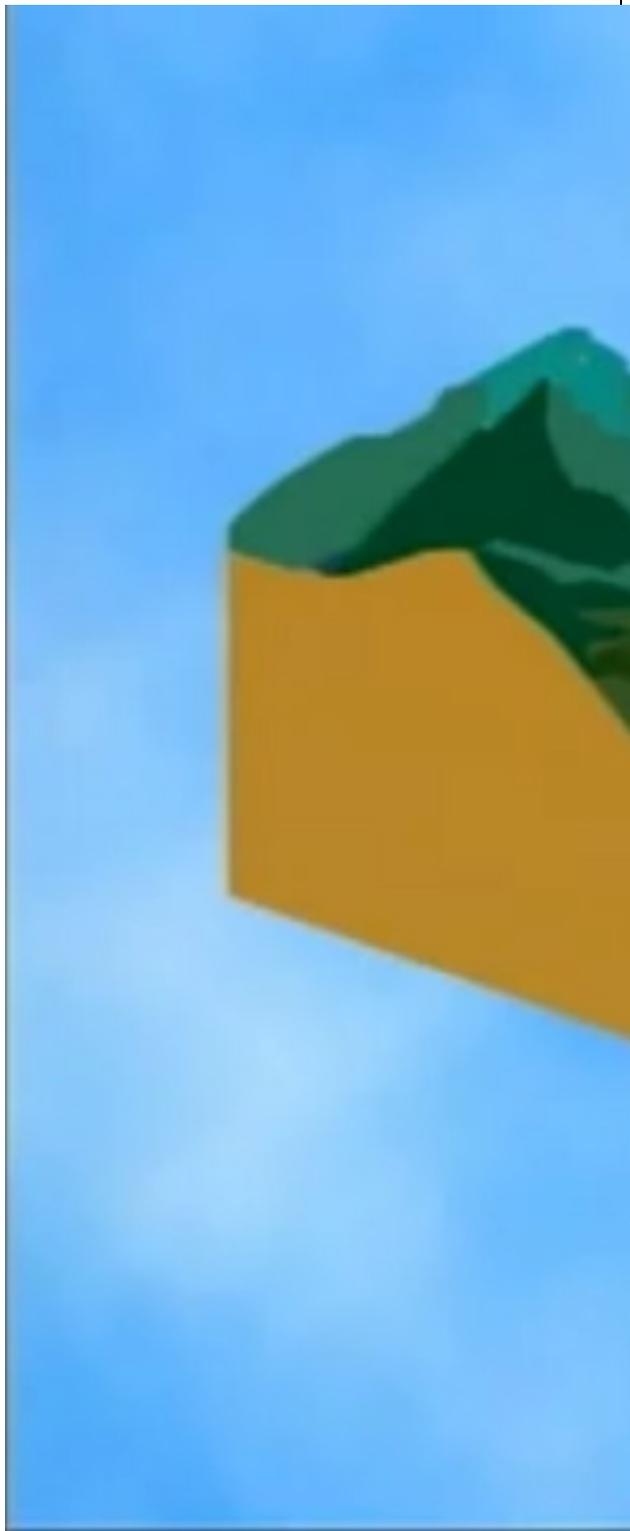
- What are the different bodies of water formed by rain?
- Does all of the rainwater flow above ground?
- Where do most bodies of water flow out to?
- How are clouds formed?
- Why did the rainfall in Ormoc produce floods and landslides?
- What parts of the tree are most important in preventing soil erosion?

3. Deepening

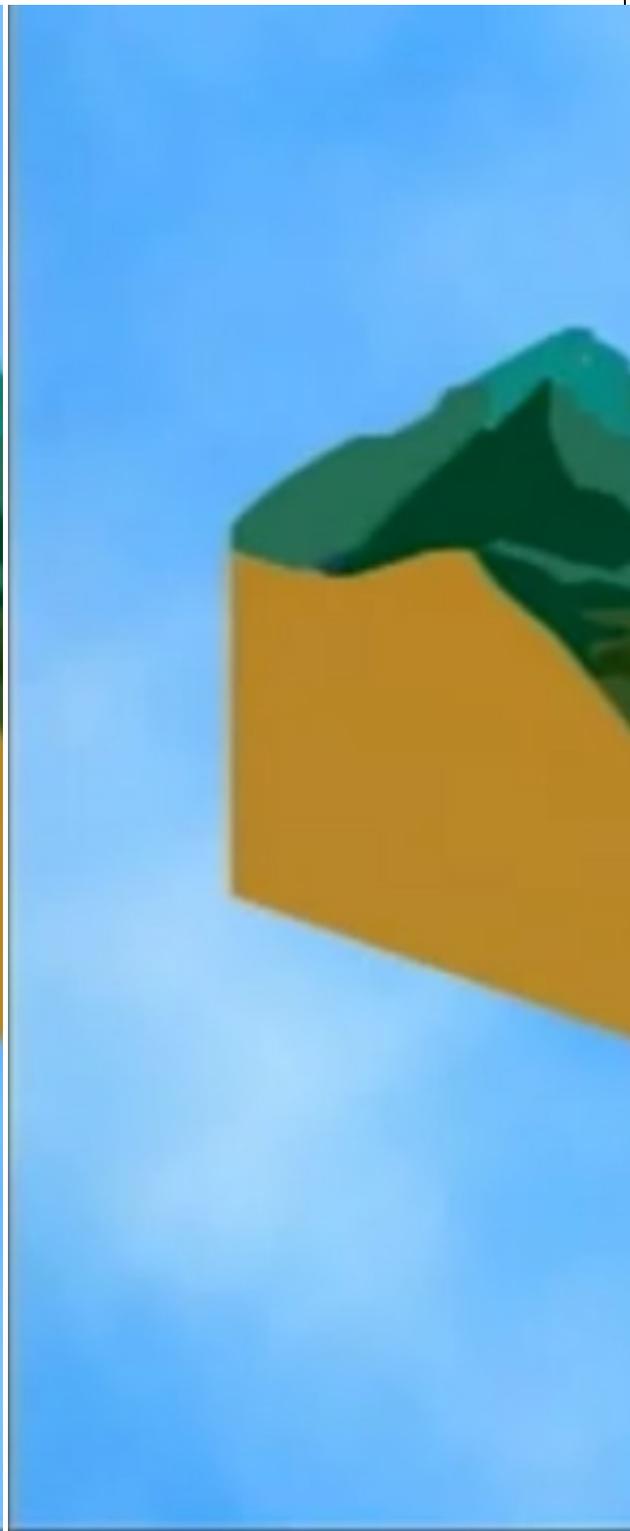
- What could the survivors of the Ormoc tragedy do to prevent floods and landslides from happening in the future?
- How should they prepare themselves for possible disasters in the future?

4. Groupwork or Activity

Divide the class into groups of 5 students each, and ask them to label and explain the water cycle. Ask the students to label the different bodies of water.



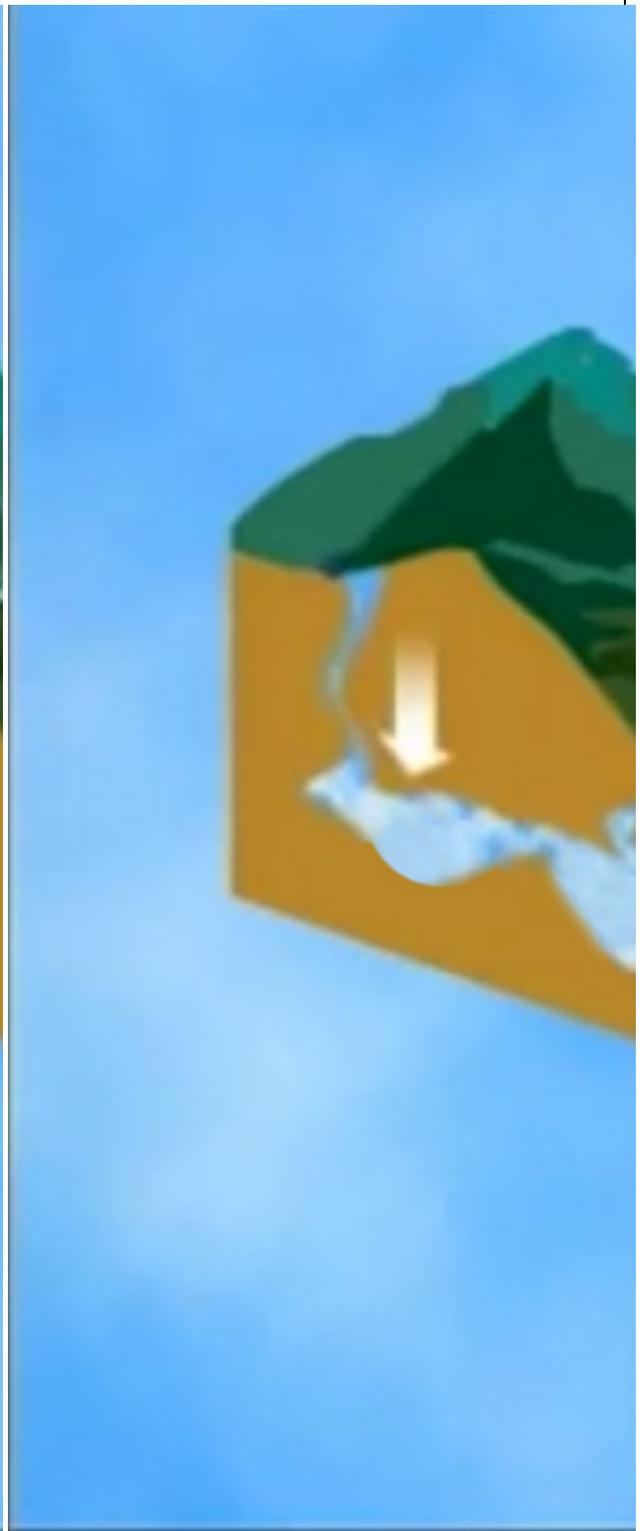
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VIII. Synthesis and Valuing

To end the session ask the following:

- Why do you think some people continue to log illegally despite knowing that they are harming the environment? Do you think these are valid reasons for them to do so? Why or why not?
- What do you think we can do to stop illegal logging and preserve our forests?

IX. Homework

1. People need trees for many different purposes. Look up how people can reduce tree consumption and preserve our forests. What forest products can be substituted with other materials?
2. What are some of the animals and plants native to the Philippines that can only be found in forests? Are they in danger of becoming extinct due to forest destruction?
3. What other disasters have you heard of or read in the news that are linked to illegal logging?

Stronger Bodies, Stronger Ties

Subject/ Grade Level:	<i>Science Grade 6</i>
Title:	<i>Stronger Bodies, Stronger Ties</i>
Competency:	<i>Physical, mental, emotional and social needs of a healthy person.</i>
KCH Learner Values:	<i>Reflective</i> <i>I reflect</i>
Critical Issue/s:	<i>Having a healthy mind and body plays a significant role in one's whole being</i>

I. OBJECTIVES:

At the end of the session, students should be able to:

- be informed of the benefits of being healthy
- know how to keep a healthy and fit body
- effectively construct sentences showing a cause and effect relationship

II. ESSENTIAL UNDERSTANDING

- Having a healthy mind corresponds to having a healthy body
- Being mentally and physically healthy would make one capable of doing more things
- Being mentally and physically healthy makes one feel good about oneself and improves one's relationship with other people

III. ESSENTIAL QUESTIONS

- Why is it important to be physically healthy?
- How would one be able to have a healthy and strong body?

IV. SUMMARY OF THE EPISODE

The episode focuses on the importance of having a healthy mind and body. It also showed ways on how to keep one's body fit. This will also show how having a strong mind and body can greatly affect one's life significantly and improve one's relationship with other people.

V. PRE-VIEWING (MOTIVATION)

1. Divide the class into 4 or 5 groups. Then ask each group to list 10 things that they think are mentally healthy.
2. Ask them to list 10 things that they think are physically healthy.
3. After which, tell them to present and explain what they have written in front of the class.
4. Then tell them that in the video that they are about to see, they would be able to learn how to have a healthy mind and body. In line with that, they would be able to be aware regarding the good effects of being mentally and physically healthy, and how it helps build healthy relationships.

VI. VIEWING PROPER

- **Why?**
"Stronger Bodies, Stronger Ties"

VII. POST VIEWING

1. Questions
 - a. Did you like the program? Why or why not?
 - b. What was the program about?
2. Review Questions

- a. Why did Ding and his family move to the province from Manila?
 - b. How can one guard oneself against common illnesses?
 - c. What food should one eat to keep a healthy body?
 - d. Aside from eating the right food, what other things can one do to keep a healthy body?
 - e. What role do family and friends play in one's health?
3. Deepening
- a. Do you think you have a healthy mind and body? Why or why not?
 - b. How does it affect your relationship with other people?
4. Group work/activity
- a. Make a short skit showing how they keep themselves healthy and fit and how it affects their lives as students.

VIII. SYNTHESIS AND VALUING

1. What are the benefits of having a healthy mind and body?
2. What do you think are the things that Ding and his family should have avoided?
3. Discuss the value of having a healthy mind and body:
 - a. Having a healthy mind may affect the physical health of a person
 - b. Having a healthy mind and body makes one capable of accomplishing tasks more effectively
 - c. Having a healthy mind and body builds healthier ties.

IX. HOMEWORK

1. Reflect on the healthy and unhealthy things that you have been doing so far.
2. Upon watching the video, would you change anything from your lifestyle? How would you be able to make your life healthier in all aspects?
3. List down your possible resolutions and present them in class next meeting.

Why?" The Awakening

Subject/Grade Level:

Science and Technology / Elementary Level - Grade 6

Title:

*"Why?"
The Awakening*

Competency:	<i>Knowledge on safety</i>
KCh Learner Values:	<i>I belong to a Community Following government safety warnings</i>
Critical Issue:	<i>Environment Safety precautions on volcano eruption, including going to the Evacuation Center</i>

I. Objectives

At the end of the session, students should be able to:

1. familiarize themselves with the safety procedures during volcanic eruptions
2. give precautionary measures to follow during volcanic eruptions
3. suggest ways on how to be prepared for disasters
4. identify different types of volcanic eruptions

II. Essential Understanding

1. Things that you need to do before a volcano erupts:
2. First, gather information in radio or television;
Second, prepare all the necessary things that you need before going to the evacuation center (including food, clothes, important belongings)
3. Main cause of volcanic eruption: We don't know
4. Signs that a volcano is about to erupt: tremors, changes in the ground formation, increase in temperature of the ground and hot springs, dying plants, release of sulfur (yellow substance on the rocks around the hot springs that smell like rotten eggs, red sky, ashfall.

III. Essential Questions

1. What are we supposed to do when a volcano erupts?
2. What are things we need to prepare before a volcanic eruption?
3. What should we do during volcanic eruptions?
4. What are the sign that a volcano is about to erupt?

IV. Summary of the Episode

A disaster is about to strike their barrio, so Emilia and Ate Ida are preparing their things and are about to leave their house to go to an evacuation centre, but Tiyo Oscar is too stubborn against believing that a volcano is about to erupt. Ate Ida tells Emilia the signs of a volcanic

eruption and how dangerous and life-threatening it can be. The alarm sounds and they go to the evacuation centre leaving Tiyo Oscar. In the evacuation centre they are all worried about Tiyo Oscar's safety but fortunately that night, he arrives at the centre. Realizing that he was wrong in staying behind, he followed their advice to leave his house for the evacuation centre.

V. Pre-Viewing (Motivation)

1. As part of the motivational activity, the teacher will describe the situation of people living near a volcano after asking the students to close their eyes, so that they can visualize it better.
 - a. Imagine that you live near the foot of a volcano and you notice signs that tell that it is going to erupt: the sky is turning red, you see people scurrying outside, looking up, talking nervously and pondering loudly about what to do, what to prepare. You hear the barangay patrol announce through a megaphone that officials are saying your village has at most an hour to pack belongings and evacuate to the nearest school in that area. Open your eyes.
2. Ask the students these questions:
 - a. What are things that you need to do?
 - b. What are things that you need to bring?
 - c. Where do you need to go?
3. Tell the students that the video they are about to see is regarding the concept of safety and preparedness, which includes steps that you are to do on the event of a volcanic eruption and the things you need to prepare and bring with you to the nearest evacuation site.

VI. Viewing Proper

- **Why: "The Awakening"** (Elementary Level - Grades 3 to 5)
Safety Procedures for Volcanic Eruption

VII. Post-Viewing

1. **Questions** (regarding the episode)
 - a. Did you like the program? Why or Why not?
 - b. Who are the characters in the story?
 - c. What is the episode about?
2. **Review Questions** (regarding the content)

- a. According to the video how do volcano erupt? (Answer: We don't know)
- b. In the Philippines who monitors volcanic eruptions?
- c. What do they use to measure the intensity of tremors? Seismograph
- d. Do you remember what the signs of volcanic eruptions are?
- e. Can you name the characters in the story?
- f. What should you do when volcano erupts?
- g. According to the video, what is the permanent danger zone?

3. Deepening

- a. Where are the Volcanoes in the Philippines?
- b. What recent are the recent volcanic eruption in the Philippines? (Share with the whole class)
- c. What things that you need to bring in the evacuation centre?

4. Group Work or Activity

- Ask the students to do a short skit or play about being prepared before a volcanic eruption.

VIII. Synthesis and Valuing

To end the session, ask the following questions:

1. How do volcanoes erupt in the first place?
2. What are things that you need bring in the evacuation site?
3. What are the signs of volcanic eruptions?
4. Who monitors volcanic eruptions?

IX. Homework

- Group the class into 3 and ask each group to make a poster showing things to be done during a volcanic eruption

The Backbone

Subject and Grade Level: *Science - Intermediate*

Title: *The Backbone*

Competency: *Backbone in the Skeletal System and Its Importance*

KCh Learner Values:

Community - Oriented
I belong to a community.

Critical Issue:

Workers as the backbone of every industry.

I. OBJECTIVES

At the end of the 50-minute period, at least 60% of the intermediate students should be able to:

- a. define backbone
- b. locate the backbone
- c. characterize the backbone and its parts
- d. conclude backbone as part of skeletal system
- e. identify different types of the backbone
- f. relate to the functions of the types of backbone
- g. identify creatures with backbones
- h. enumerate effects when backbone is damaged

II. ESSENTIAL UNDERSTANDING

- the backbone is part of the skeletal system
- vertebrates are animals with backbone
- the backbone is an important part of the body
- the backbone is composed of different parts
- the skeletal system supports and frames the body

III. ESSENTIAL QUESTIONS

- the backbone is part of the skeletal system. How will the damage affect the individual or animal?
- As a student, how can you protect your backbones?

IV. SUMMARY OF THE EPISODE

Time of harvest of the mangoes and workers are busy picking and packing. A boy suddenly falls from a stair while picking. The parents and workers cared and ask how he is but the “katiwala” seems not to care. At a discussion of the grumpiness of the katiwala, news struck them that the boy collapsed. The katiwala arrives and the workers confront him on how he interacts with them. All of them are furious about each other but after they cooled down their heads

they arrived at a conclusion on how to handle the situation. The katiwala helped them and the workers responded in kind.

V. **PRE-VIEWING (Motivation)**

1. Ask students to bring materials like masking tapes, papers and old newspapers, twigs or branches or sticks, and rubber bands the meeting before.

As a motivational activity, ask the students to group themselves to 4 or 5, and ask them to build a bridge that can stand on its own while you make a kite. You may also bring a fish skeleton (intact backbone) or human skeletal system figure or anything that has a backbone.

2. . Ask the students what they notice about the bridge, the kite, and the skeleton. Then ask them these questions:
 - What is common about the three?
 - What do you think will happen if the common part is missing?
 - Do you think they can stand on their own?
3. Tell the students that the video they are about to see will reveal the common part and what will happen if it is damaged. Take note on the different part and know the value of it.

VI. **VIEWING PROPER**

- **WHY?** (intermediate -- Science)
The Backbone

VII. **POST-VIEWING**

1. **Questions** (re the episode)
 - i. Did you like the program? Why or why not?
 - ii. What was the program about?
2. **Review Questions** (re content)
 - i. what happened to the boy?
 - ii. what happens if his backbone is damaged?
 - iii. what are the different parts of the backbone?
 - iv. What are vertebrates?
 - v. Can you give examples of vertebrates?
 - vi. What happens to the bones when we get older?

3. Deepening

- i. What are the symptoms if the backbone is damaged?
- ii. What will you do to check if he is okay?
- iii. What will you do if the backbone is damaged?

4. Group Work/ Activity

- a backbone image/drawing/ printout is given. Ask the students to identify the types of backbones, description of it and locate it at the drawing.

VIII. Synthesis and Valuing

To end the session:

- give tips on how to handle allegedly damaged backbone cases
- how to check if the backbone is damaged
- what can be done if the backbone is damaged

IX. Homework

For their homework, give the students the following activities:

- make a list of animals with backbone in their community
- draw or sketch the animal of your choice from the list

The Waterboys

Subject/Grade Level: *Science/Grade 5*

Title: *The Waterboys*

Competency: *Basics of Simple Machines*

KCh Learner Values: *Creativity*

I solve problems creatively.

Critical Issue: Creativity allows innovation which then helps to improve the quality of life

I. Objectives

At the end of the session, students should be able to:

- define what machines are;
- name the six kinds of simple machines;
- summarize how each kind of simple machines work;
- cite examples where the six kinds of simple machines are used in everyday life
- explain how it affects the quality of life of people

II. Essential Understanding

- Anything that helps a person with a task is called a machine.
- All machines are made up of two or more of the six simple machines available.
- There are six (6) kinds of simple machines: wheel and axle, screw, lever, pulley, wedge, and inclined plane.
- Machines help make our work easier.

III. Essential Questions

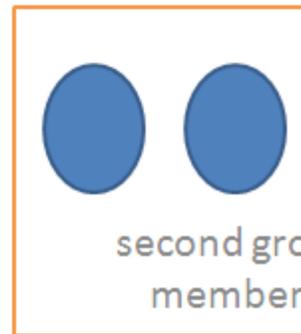
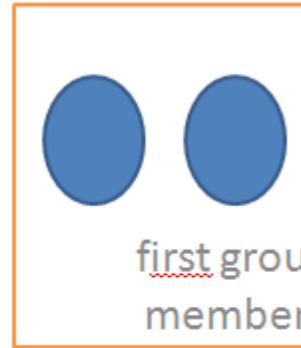
- How do machines help in decreasing our work load?
- What are the implications, or the effects, of machines in the workforce/employment of people?

IV. Summary of the Episode

This episode focuses on the importance of machines in our daily lives. It discusses the six types of simple machines and how they work. The main characters built a simple machine to ease the effort exerted from performing everyday tasks. Shown also in this episode are examples of where the six simple machines may be used.

V. Pre-Viewing (Motivation)

1. As part of the motivational activity, ask the class to form two groups. Each group will have an equal number of books (preferably at least 12 pieces of books per group; any book of about 1-inch thickness). In a spacious area, (in a quadrangle, for example) the two groups will form two separate lines for the relay game, as shown in the picture below. Each representative of the first group will have to carry all the books by hand throughout the relay game; the representatives of the second group will carry the books by using a bag with strollers (like in the picture shown below). The first group who finishes the relay game wins.



2. Ask the students to reflect on the game. Ask them the following questions:

- Did you think the game was fair? Why or why not?

- For group 1 members, how did you feel about the game? Did you have difficulties finishing the relay game? If yes, what were the difficulties you experienced?
 - For group 2 members, how did you feel about the game? Do you think you had an advantage over the first group? If so, why?
3. The game shows how certain things, like the bag with wheels, help make our work easier. The wheel and axle, like the one used in stroller bags, are examples of simple machine.
 4. Tell the students that in the video they are about to see, the concept of simple machines will be explained further. The five other kinds of simple machines, aside from the wheel and axle will also be discussed.

VI. Viewing

- **Why?** (Grade 5 - Science)
Simple Machines

VII. Post Viewing

1. Questions (re the episode)

- Did you like the program? Why or why not?
- What was the video about?

2. Review Questions (re content)

- According to the video, what are machines?
- What is a simple machine?
- True or False. Complex machines are actually made up of two or more of the six kinds of simple machines mentioned in the video.
- What are the six kinds of simple machines?
- In the video, what are the three simple machines that make up Anna's invention (to help her carry the containers of water)?
- Can you think of other objects that make use of simple machines? In giving examples, don't forget the simple machine used in the object. (For example: Flagpoles use pulleys.)

3. Deepening

- How do humans benefit from machines?
- Are there instances where machines do harm, or pose negative effects, to humans? Give examples of possible instances.
- How can we balance the positive and negative effects of machines, specially in the employment aspect?

4. Group Work/Activity

- Group the class into three groups. Each group will think of an invention that will help mankind (in any way) using at least three of the six simple machines. They will draw their “invention” on a piece of paper and present their idea in front of the class. Their presentation should include the following: the name of the invention, the simple machines that comprise their invention, how it works and its benefit to mankind.

VIII. Synthesis and Valuing

To end the session, ask the following:

1. Are machines more of a useful invention, or a destructive invention? Why do you think so?
2. Would it be possible to live in a world without machines? Why or why not?
3. What do you think should the government do regarding the unemployment of people (caused
4. by the machines in the workplace? How can we solve this problem?
5. Machines, like many other things, when not used properly, may cause injuries and
6. accidents. Explain to the class some precautionary measures when handling any kind of
7. machines.
 - Keep any machine in good condition, some machines (especially those made of metal) require oiling to avoid rusting and tarnishing.
 - See to it that machines are in good condition to ensure safety while using them.
 - Keep all machines in their proper places when not in use.
 - Be careful when carrying machines from one place to another.

Where Do Babies Come From

Subject/ Grade Level:

Science and Technology – Grade Six

Title:

Where Do Babies Come From

Competency:

Basics of body systems and gender differences

KCh Learner Value:

Responsible

I am responsible in taking care of my sibling especially the younger ones.

Critical Issue:

Respecting their parents and caring for their siblings.

I. Objectives:

At the end of the class, the students should be able to:

- name the parts of both the female and the male reproductive system
- classify whether or not a part belongs to the female or the male reproductive system
- actively participate in the activities in class
- familiarize themselves with the process of fertilization and how a baby develops inside the womb of the mother

II. Essential Learning:

1. Even though men and women can do almost all the same jobs, there is one thing a man cannot do. It is giving birth.
2. The reproductive system of a female is different from a male's. The female reproductive system is specialized to give birth, keep the baby and help him/her grow before he/she is born, while the male's contributes to fertilization.
3. Reproduction starts with fertilization or when the sperm cell from the male reaches the egg cell of the female.
4. Reproduction is more than just fertilization or the meeting of the sperm and the egg. It is also about a married couple loving and respecting each other and their readiness and willingness to take the responsibility of raising a child.
5. After giving birth to the baby, his/her parents must continually take good care of him/her and provide his/her basic needs.

III. Essential Questions:

1. How does the sperm cell reach the egg cell? What happens after that?
2. Are there differences in the girls' reproductive system with the boys'? If there are state them and explain why they differ?
3. What can the boys do that cannot be done by the girls?
4. Are babies important?

IV. Summary of the Episode:

This episode describes the different reproductive organs of the male and female and discusses the purpose of each organ. It also discusses the processes that human beings go through in reproduction or how a baby is formed.

**V. Pre-viewing/ Motivation
(either of the 3)**

1. Let the students imagine themselves when they are still babies-- when they can neither talk nor walk. Ask the students to draw what they are seeing. Give them five to ten minutes to finish their drawing. Ask at least five students what is the reason behind their drawings.
2. A day before the class, ask each one of the students to bring at least one clothing apparel either from their mom or their dad. The teacher must have a two bow before he/she enters the classroom. When the class has started, the students must put all their mothers' clothes in one box and their fathers' clothes in the other. Group the class into their gender, an all-girl group and an all boy-group. After that, the students will line up and the teacher will reverse the box, the mothers' clothes will be for the boys' group and vice versa.

*Mechanics of the game:

- a. One by one, each group member must wear one clothing apparel from the box assigned to them. After they have worn the clothes, they will go to the back of the line acting what their clothes seem to symbolize. For example, a duster will symbolize as if a mother is cleaning the house or for example a jersey shorts will symbolize a basketball player, so the student wearing a pair of jersey shorts will act like she (because the one wearing a father's clothes is from the girls group) is dribbling a ball or shooting a ball.
- b. The first team to completely and successfully dress and act like their parents will win.

After the winning team has been awarded, the teacher will ask the students: Do you think what your mother can do can also be done by your father? After the students have answered, the teacher will introduce giving birth.

3. The day before the class, ask the students to bring the youngest picture that they have of themselves at home and ask their parents when the picture was taken.

The teachers will collect the pictures and determine who brought the youngest picture of themselves among the class. Then the teacher will ask the students to think where they are before the picture was taken. So the discussion will lead to some children saying that they come from their mother's tummy. Then the video will be introduced.

VI. Viewing Proper

- **Why (Elementary)**
"Where Do Babies Come From?"

VII. Post-viewing

1. Questions (Episode)

- a. Did you like the program? Why or why not?
- b. What was the program about?

2. Review Questions (Content)

- a. Why can't men give birth?
- b. Enumerate at least three organs that make up the male and female reproductive system and their functions.
- c. Describe briefly the process of reproduction.
- d. What do you call the process when the sperm meets the egg cell? After that, what will be formed?

3. Deepening

- a. Have you asked the same question in the video to your parents (where do babies come from)? What did they tell you? What are the things that you have learned today that are different from your parents' answers?
- b. Do you have a baby at home? How are you caring him/her? Will you now care even more to him/her after watching the video that says babies are not easily conceived?
- c. Will you respect even more your mom and dad because without them you are not here today?

4. Group Work/ Activity

Game: The teacher will divide the class into four groups. There will be three stations that is needed to accomplish by the four groups. The teacher must beforehand create four sets of puzzle of the reproductive organs of both men and women.

Station 1: The students must find puzzle pieces hidden inside the room specifically for their group (for example, a puzzle pieces with a red highlight belongs to the first group, those with blue belongs to the second etc.). After finding the puzzle pieces, the blackboard or whiteboard will be divided into four, so that the students can stick the puzzle pieces in the blackboard and solve it.

Station 2: One student in each group will be blindfolded. His/her teammates will be handling the labels of the different parts of the reproductive system. They will coach the one blindfolded into where he/she will stick the label he/she is handling. After correctly accomplishing the second station, they will proceed to the third station.

Station 3: The students collaboratively will give the function of each part. The first team to finish the game wins.

VIII. Synthesis and Valuing

To end the session, ask the following questions:

- a. According to the video, having a baby is more than just the sperm cell meeting the egg cell. What are the things to consider when having a baby?
- b. After the baby has come out from the mother's womb, what does he/she needs, or what are his/her basic needs?

IX. Homework

1. The students must draw a shopping cart or a bag that contains all the things they should eat and drink while they are young so that when they become adults they will become healthy.
2. The students must draw how they see their families when they are still babies especially on how they see themselves taken care of by their families.