



Primary
Education
Smart+
Prathomsuksa



Teacher Guide

Health and Physical Education



Based on the Basic Education Curriculum B.E. 2551

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Preface

Health and physical education refers to the education about health with the aims of maintaining and strengthening health and sustainable development of quality of life of individuals, families and communities.

Health Education places emphasis on guiding learners to concurrently develop behaviours regarding knowledge, attitude, morality, values and health practices.

Physical Education places emphasis on guiding learners to participate in kinaesthetic activities, physical exercises, playing games and sports. It serves as an instrument in holistic development in all respects – physical, mental, emotional, social and intellectual, as well as imparting capacities for health and sports.

The learning areas for health and physical education include the following:

- **Human Growth and Development:** the nature human growth and development; factors affecting growth; relationships and linkages in the functioning of various body systems as well as self-conduct for attaining growth and development in accord with students' age.

- **Life and Family:** students' values and those of their families; self-adjustment to changes in various respects – physical, mental, emotional, and sexual; creating and maintaining relationships with others; sexual health practices and life skills.

- **Movement, Doing Physical Exercises, Playing Games, Thai and International Sports:** various forms of movement; participation in a variety of physical activities and sports, both as individuals and in teams, and both Thai and international sports; observance of rules, regulations, orders, agreements for participation in physical activities and sports, and having sporting spirit.

- **Strengthening of Health, Capacity and Disease Prevention:** principles and methods of selecting food for consumption, health products and services; capacity-strengthening for health and prevention of communicable and non-communicable diseases.

- **Safety in Life:** self-protection from various risk behaviours, i.e., health risks, accidents, violence, harm from use of medicines and addictive substances as well as guidelines for promoting safety in life.

Learners' Quality

- Understand relationships and linkages in the functioning of various systems of the body and know how to take care of important parts of such systems.
- Understand the nature of changes in various respects—physical, mental, emotional, social, and sexual urge of men and women; when entering the age of puberty and adolescence, able to appropriately adjust and manage themselves.
- Understand and appreciate value of having a warm and happy life and family.
- Are proud of and appreciate value of their own sex; able to correctly and appropriately observe sexual practices.
- Protect and avoid risk factors and risk behaviours detrimental to health or conducive to contracting diseases, accidents, violence, addiction and sexual harassment.
- Skilful in basic movements and self-control in coordinated movement.
- Know principles of movement and able to select participation in physical activities, games, folk games, Thai sports and international sports

with safety and enjoyment; have sporting spirit by observing rules, regulations, their own rights and duties until successful completion of tasks

- Plan and regularly participate in physical activities and activities for physical capacity-strengthening for health as appropriate and required.

- Are able to appropriately manage emotions, stress and health problems.

- Are skilful in seeking knowledge, data and information for health-strengthening.

For common understanding and correct interpretation, the curriculum prescribes various codes for learning standards and indicators. One example is shown below:

H 1.1 Gr 6/2	
H	Subject area of Health and Physical Education
1.1	First subject area, Standard 1
Gr6/2	Indicator 2 for Grade (Prathomsuksa) 6

Strands and Learning Standards

Strand 1: Human Growth and Development

Standard H1.1: Understanding of nature of human growth and development

Strand 2: Life and Family

Standard H2.1: Understanding and self-appreciation; family; sex education; and life skills

Strand 3: Movement, Physical Exercise, Games, Thai and International Sports

Standard H3.1: Understanding and skills in movement; physical activities; playing games and sports

Standard H3.2: Favour for physical exercise, playing games and sports regularly; observance of rights, rules and regulations; having sporting spirit; having true competitive spirit and appreciation of the aesthetics of sports

Strand 4: Health Strengthening, Capacities and Disease Prevention

Standard H4.1: Appreciation and skills in health strengthening; maintaining one's health; disease prevention and strengthening capacity for health

Strand 5: Safety in Life

Standard H5.1: Prevention and avoidance of risk factors; behaviours detrimental to health; accidents; use of medicines; addictive substances and violence

Yearly Teaching Plan

Health and Physical Education

Grade 6 (Prathomsuksa 6)

9 chapters

80 hours

Learning area	Duration (hours)
1. Our Body <ul style="list-style-type: none">• Reproductive system• Circulatory system• Respiratory system	10
2. Building Relationships <ul style="list-style-type: none">• Building and maintaining a healthy family relationship• Building and maintaining a long lasting friendship• Building and maintaining relationships with other people• Teamwork	8
3. Risky Behaviours <ul style="list-style-type: none">• AIDS• Unplanned pregnancies• Factors that might lead to early sexual activities• Avoiding early sexual activities	6
4. Movement and Fitness <ul style="list-style-type: none">• Movements in sports• Movements with equipment• Rhythmic movements• Physical fitness	13
5. Games and Sports <ul style="list-style-type: none">• Thai sports• International sports• Improving skills• Recreational activities	14

6. The Environment and Human Health <ul style="list-style-type: none"> • Pollution • Pollution solutions • Social responsibility towards the environment 	9
7. Infectious Diseases <ul style="list-style-type: none"> • Infectious diseases in Thailand • Effects of infectious diseases • General methods of prevention of infectious diseases 	8
8. Natural Disasters <ul style="list-style-type: none"> • Natural disasters • Effects of natural disasters 	7
9. Drug Addiction <ul style="list-style-type: none"> • Causes of drug addiction • Harmful effects of drug addiction • How to prevent drug addiction 	5

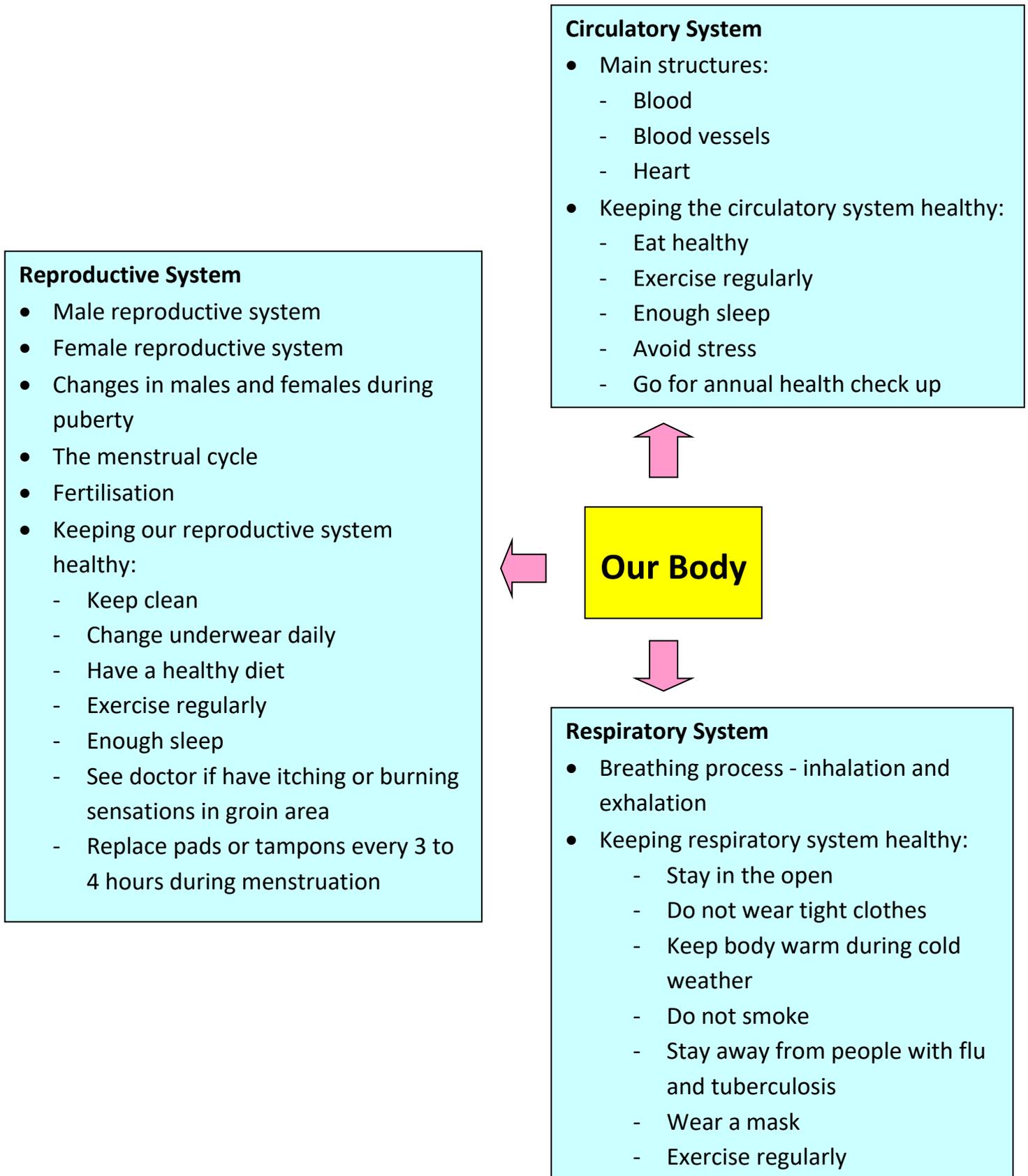
Note: The hours needed for each subtopic can be changed when necessary. The above allocated hours are just a suggestion. Total hours for this subject is as prescribed in the basic learning time structure, while the learners must attain the standard as prescribed in the learning standards and indicators.

Chapter 1 – Our Body

Indicators and learning areas (10 hours)

Indicator	Learning Area
H1.1 Gr6/1 Explain the importance of reproductive and circulatory systems affecting health, growth and development.	<ul style="list-style-type: none">• Reproductive system• Circulatory system
H1.1 Gr6/2 Explain methods of taking care of reproductive, circulatory and respiratory systems for normal functioning.	<ul style="list-style-type: none">• Reproductive system• Circulatory system• Respiratory system

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand the importance of a healthy reproductive, circulatory and respiratory system.

Learning Outcomes

Students will be able to:

1. Maintain a healthy reproductive, circulatory and respiratory system.
2. Know the importance of the reproductive, circulatory and respiratory system on health.

Learning Areas

- Reproductive system
- Circulatory system
- Respiratory system

Teaching and Learning Activities

1st – 3rd hours (Reproductive System)

1. Show the students diagrams of the male and female reproductive systems. Ask the students to identify the names of the structures.
2. Explain to the students about the function of the structures in the male reproductive system. Refer to pages 1 and 2.
3. Explain to the students about the function of the structures in the female reproductive system. Refer to pages 3 to 5.
4. Next, divide the students into five groups. Give each group a card with the names of the male and female reproductive system.
5. For the male reproductive system, the cards contain the names of these structures:

- a) Testes
 - b) Scrotum
 - c) Penis
 - d) Epididymis
 - e) Urethra
 - f) Seminal vesicle
 - g) Prostate gland
6. For the female reproductive system, the cards contain the names of these structures:
- a) Ovary
 - b) Fallopian tube
 - c) Uterus
 - d) Vagina
7. Give the students cards that contain the functions of a structure for the male and female reproductive system. Ask the students to match the structures and the functions of the male and female reproductive system on the board. The group that finishes matching the structures with the functions first will win.
8. Show the students the picture of a young girl and an adult woman. Paste the pictures on the board. Let the students observe the differences. Ask the students to write the changes in the female during puberty on the board.
9. Show the students the picture of a young boy and an adult man. Paste the pictures on the board. Let the students observe the differences. Ask the students to write the changes in the male during puberty on the board.
10. Show the students diagrams of the uterus during different stages of the menstrual cycle. Let the students observe the difference in the thickness of the uterine wall.

11. Explain to the students about menstruation. Show the connection between the thicknesses of the uterine wall with the stages of the development of the ovum. Advise the female students about the importance of maintaining hygiene during menstruation. Refer to pages 4 and 5.
12. Show the students a pad and a tampon. You may choose to show the real thing or pictures.
13. Show the students a video about how fertilisation occurs. Then, ask the students to write a summary of fertilisation based on the video shown.
14. Advise the students to keep their reproductive system healthy. Give some suggestions. Refer to page 5.
15. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

4th – 6th hours (Circulatory System)

1. Show the students a diagram of the circulatory system. Explain briefly about the reproductive system.
2. The main structures of the cardiovascular system are the blood, blood vessels and the heart.
3. Explain to the students about the structures and functions about the components of blood, which are:
 - (a) Plasma
 - (b) Platelets
 - (c) White blood cells
 - (d) Red blood cells
4. Show the students pictures of each of the components above and ask to draw the structures in their notebooks.
5. Blood vessels can be categorised into arteries, capillaries and veins.

6. Show the students the diagram of each of the blood vessel. Let them observe the differences in the structure.
7. Explain to the students about the structure and functions of the artery, capillary and vein. Refer to page 9.
8. Bring a model of the heart from the science lab. Show and explain about the chambers of the heart and the blood vessels carrying blood into and out of the heart. Refer to page 9.
9. Show the students a diagram of the pathway of blood flow in the circulatory system.
10. Inform the students on the importance of keeping the circulatory system healthy. Give suggestions on how to keep their circulatory system healthy. Refer to page 10.
11. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

7th – 9th hours (Respiratory System)

1. Show the students a diagram of the respiratory system. Let them observe the structures. Explain about the respiratory system. Refer to pages 13 and 14.
2. Show the students a simple video on the process of breathing.
3. Assemble a model of the lungs with the ribcage. Get a bell jar with a rubber sheet attached to the bottom. Then attach two pieces of balloons to the shorter arms of a Y-tube. Attach a cork with a hole in the middle to the longer arm of the Y-tube. Insert the Y-tube into the mouth of the bell jar. The cork will serve as a stopper to prevent air from entering the bell jar. The bell jar represents the thoracic cavity while the rubber sheet represents the diaphragm and the balloons represent the lungs.
4. To show inhalation or 'breathing in', pull down the rubber sheet. The balloons are filled with air and they expand. To show exhalation or

‘breathing out’ push in the rubber sheet and air will escape from the balloons causing them to deflate.

5. Explain about breathing to the students. Refer to page 14.
6. Inform the students on the importance of keeping the respiratory system healthy. Give suggestions on how to keep their respiratory system healthy. Refer to page 15.
7. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

10th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 6, 7, 11, 12, 16 and 17 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Observing
2. Visualising
3. Relating
4. Comparing and contrasting

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Video on fertilisation and breathing
3. Diagrams of male and female reproductive systems, stages of uterus during menstrual cycle, circulatory system, and respiratory systems.
4. Cards
5. Sticky tape
6. Pads and tampon (optional)
7. Bell jar
8. Rubber sheet
9. Y-tube
10. Balloons
11. Cork



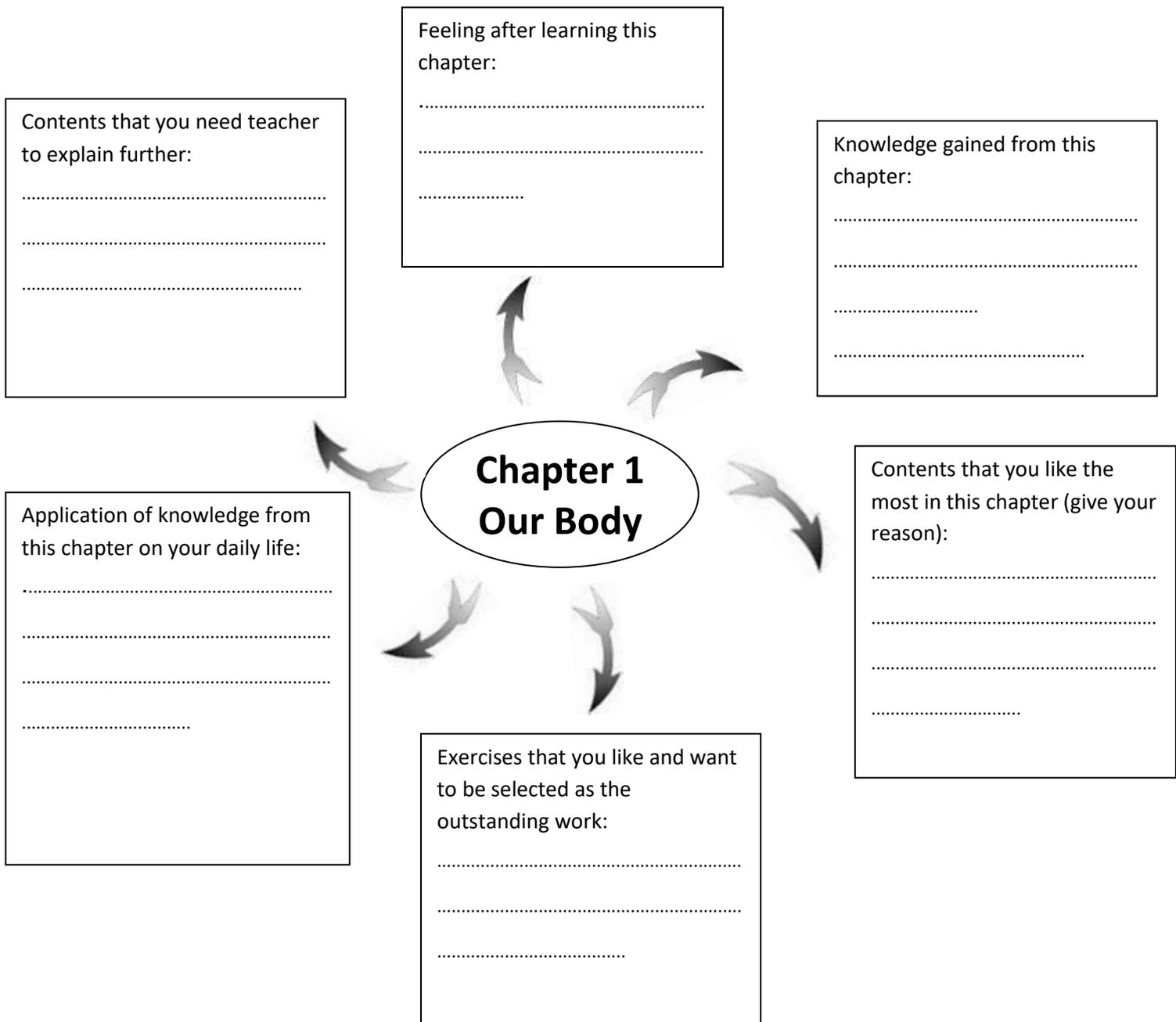
Learning Outcome Form

Name-Surname: No. Prathomsuksa:

..... Date:

Chapter 1 Our Body

Explanation: Summary of learning outcomes

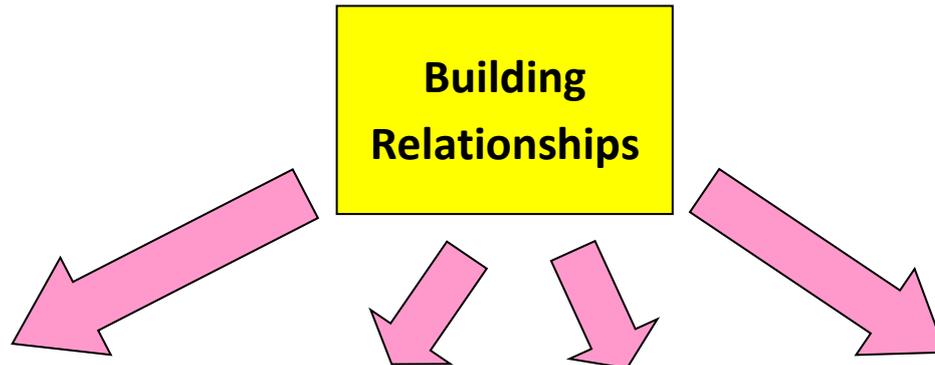


Chapter 2 – Building Relationships

Indicators and learning areas (8 hours)

Indicator	Learning Area
H2.1 Gr6/1 Explain the importance of creating and maintaining relationships with others.	<ul style="list-style-type: none">• Building and maintaining a healthy family relationship • Building and maintaining a long lasting friendship • Building and maintaining relationships with other people • Teamwork

Conceptual Map



Building and maintaining a healthy family relationship

- Take care of one another
- Do your own household chores
- Show respect for the elderly
- Have open discussions with one another
- Follow family rules
- Participate in family activities frequently
- Help others
- Be polite to everyone

Building and maintaining a long lasting friendship

- Show respect and be polite
- Be helpful and encouraging
- Share things and do not be selfish
- Apologise when you make mistakes and be willing to forgive
- Show concern
- Be honest
- Listen to others and respect their opinions
- Learn how to make friends with the opposite sex
- Have fun
- Keep in touch

Building and maintaining relationships with other people

- Be cheerful
- Be polite
- Respect the elderly
- Treat others with concern and consideration
- Apologise if wrong and be willing to forgive
- Do not be a nuisance

Teamwork

- Plan and organise the work. Get the right man for the job
- Everyone in the team must do his or her best
- Listen and respect others opinions
- Collaborate to achieve the objectives of the team

Learning Objectives

Students will be taught to:

1. Understand the importance of creating and maintaining relationships with others.

Learning Outcomes

Students will be able to:

1. Build and maintain a healthy family relationship.
2. Build and maintain long lasting friendships.
3. Build and maintain relationships with other people.
4. Work in a team without problems.

Learning Areas

- Building and maintaining a healthy family relationship
- Building and maintaining a long lasting friendship
- Building and maintaining relationships with other people
- Teamwork

Teaching and Learning Activities

1st – 2nd hours (Building and maintaining a healthy family relationship)

1. Ask the students about their family. Do they feel like they have a happy family? Are they close to their family members?
2. Explain to the students on the importance of building and maintaining a healthy family relationship. Give suggestions on how to build and maintain a healthy family relationship. Refer to pages 18, 19, and 20.
3. Ask the students to complete the task in Activity Corner 1 on pages 20 and 21.
4. Ask the students to keep a diary for one week. In that one week, they must write down the efforts they made to build and maintain a healthy relationship with their family members.
5. After one week of writing, ask the students to go through the diary. Do they spend enough time with their family members? Do they show respect to and help their family members? Advise the students to put in more effort if they think that they are not doing enough to build and maintain a healthy relationship with their family members.
6. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

3rd – 4th hours (Building and maintaining a long lasting friendship)

1. Explain to the students on the importance of friendship. Advise them to cherish and love their friends. Give suggestions on how to build and maintain a long lasting friendship. Refer to pages 21 to 23.
2. Divide the students into 5 groups. Give the situations where they are having trouble with their friends. Ask them to find a solution that will keep peace and maintain their friendships. Then, they must present their solutions to their classmates.

3. Ask the students to complete the task in Activity Corner 2 on pages 23 and 24.
4. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

5th hour (Building and maintaining relationships with other people)

1. Ask the students if they have build relationships with other people. They may be shopkeepers, neighbors, or even students from other schools.
2. Explain to the students that building and maintaining good interpersonal relationships with other people will produce a pleasant and peaceful society. Give suggestions on how to build and maintain relationships with other people. Refer to pages 24 and 25.
3. Ask the students to give other suggestions on how to build and maintain relationships with other people.
4. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

6th - 7th hours (Teamwork)

1. Ask the students to give examples where teamwork is necessary.
2. Elaborate to the students about teamwork. Teamwork improves relationships. Advise them to always be willing to contribute when working in a team. Give suggestions on how to ensure good teamwork. Refer to page 26.
3. Ask the students to work in a team to create a presentation on the importance of interpersonal skills. Emphasise the importance of having good teamwork when doing the preparations.
4. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

8th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 27 to 30 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Observing
2. Problem solving
3. Teamwork
4. Social skills

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Diary



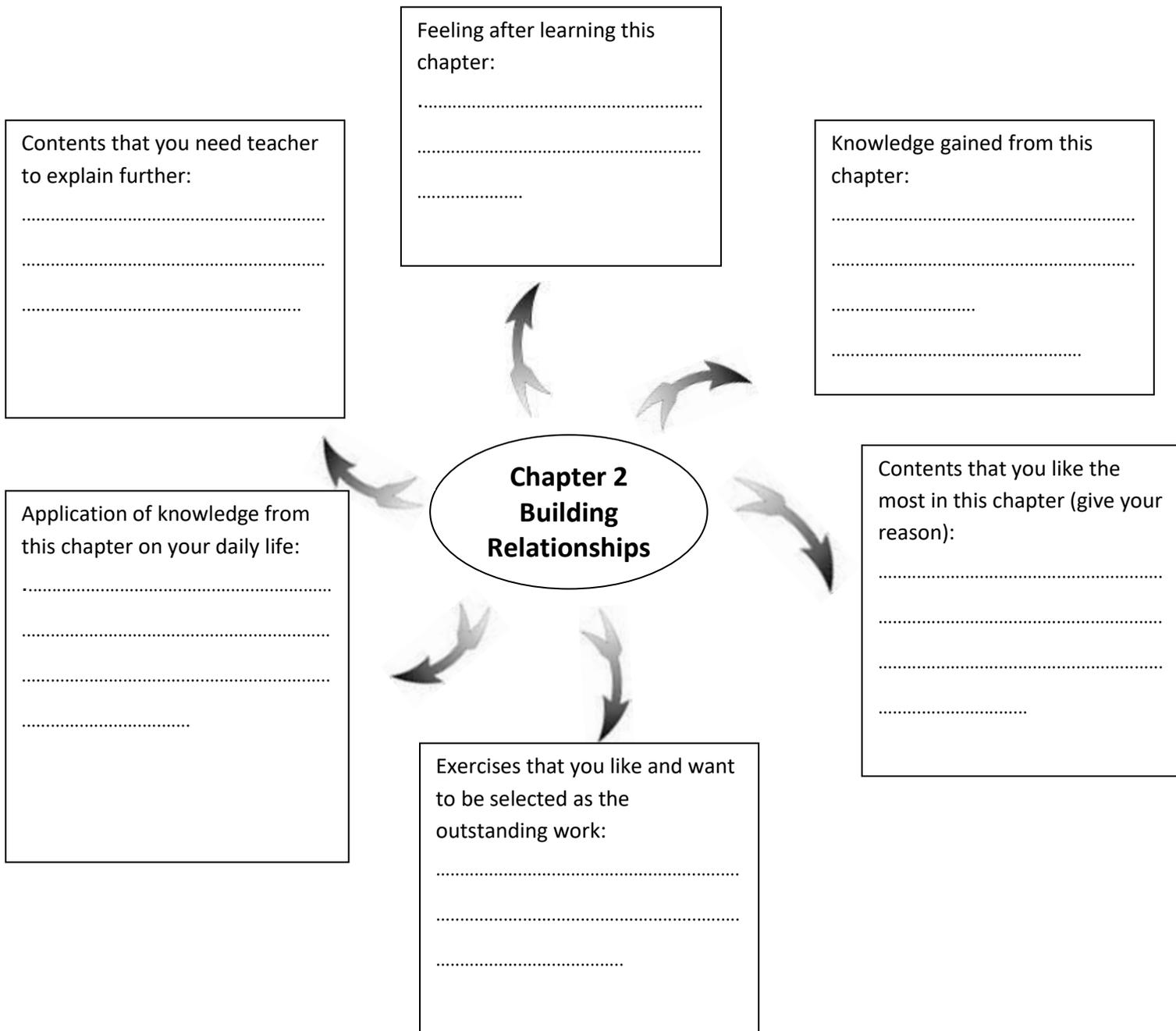
Learning Outcome Form

Name-Surname: No. Prathomsuksa:

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Chapter 2 Building Relationships

Explanation: Summary of learning outcomes



Chapter 3 – Risky Behaviours

Indicators and learning areas (6 hours)

Indicator	Learning Area
H2.1 Gr6/2 Analyse risk behaviours conducive to sexual intercourse, contracting AIDS and premature pregnancy.	<ul style="list-style-type: none">• AIDS• Unplanned pregnancies• Factors that might lead to early sexual activities• How to avoid early sexual activity

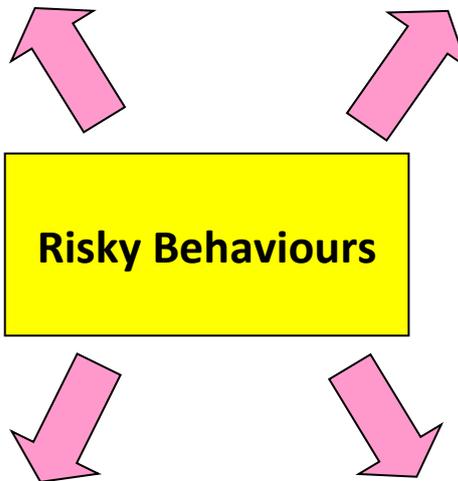
Conceptual Map

AIDS

- Caused by Human Immunodeficiency Virus (HIV)
- Infected by:
 - Sharing needles
 - Drinking breast milk of infected mother
 - Having sex with an infected person
- Known as sexually transmitted disease (STD)

Unplanned Pregnancies

- Occurs by premarital sex
- Shunned by society
- Financial burden
- Emotional burden
- Life changing



Risky Behaviours

Factors That Might Lead to Early Sexual Activities

- Wearing revealing clothes
- Spending time alone with the opposite sex in a private place
- Too much physical contact between boys and girls
- Taking too much alcoholic drinks and drugs
- Reading or watching pornographic materials
- Curiosity and lack of information about sex

Avoiding Early Sexual Activities

- Maintain a healthy relationship with the opposite sex
- Avoid spending time alone with the opposite sex in private places.
- Wear decent clothes
- Avoid drugs and alcoholic drinks
- Avoid pornographic materials
- Leave, scream or escape when not comfortable with a certain situation

Learning Objectives

Students will be taught to:

1. Understand the risks involved in early sexual activity.

Learning Outcomes

Students will be able to:

1. Know that having sex may lead to AIDS and unplanned pregnancies.
2. Avoid early sexual activities.

Learning Areas

- AIDS
- Unplanned pregnancies
- Factors that might lead to early sexual activities
- How to avoid early sexual activities

Teaching and Learning Activities

1st – 2nd hours (AIDS)

1. Show the students videos on AIDS awareness.
2. Give the students pamphlets on AIDS.
3. Ask the students what they know about AIDS.
4. Explain to the students about AIDS. Inform them that AIDS is a sexually transmitted disease (STD). Elaborate briefly on STDs and give examples to the students. Refer to pages 32 and 33.
5. Ask the students to make a poster about AIDS awareness. Paste the posters around the school for others to see and help create awareness about AIDS.
6. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

3rd hour (Unplanned Pregnancies)

1. Help the students recall about how a baby is produced through reproduction from the previous chapter. Explain to the students that premarital sex can lead to unplanned pregnancy.
2. Ask the students to imagine that they are pregnant and going to have a baby soon. What will they do? Divide the students into groups. Let them discuss. They may use the questions on pages 33 and 34 as a reference.
3. Ask the students to imagine that they already have a baby. What are they going to do with the baby? Can they afford to raise the baby? Are they ready to be parents? Let the students discuss in groups.
4. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

4th hour (Factors That Might Lead to Early Sexual Activities)

1. Explain and elaborate to the students to factors that might lead to early sexual activity. Refer to pages 35 and 36.
2. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

5th hour (Avoiding Early Sexual Activities)

1. Inform the students that early sexual activity is very risky. Advise them to avoid early sexual activity. Give suggestions on how to do so. Refer to pages 37 and 38.
2. Ask the students to complete the tasks in Activity Corner on page 39.
3. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

6th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercise on pages 40 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Visualising
2. Generating ideas
3. Evaluating
4. Problem solving

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Color pencils/Crayons/Paint
3. Drawing paper
4. Pamphlets on AIDS awareness
5. Videos on AIDS awareness



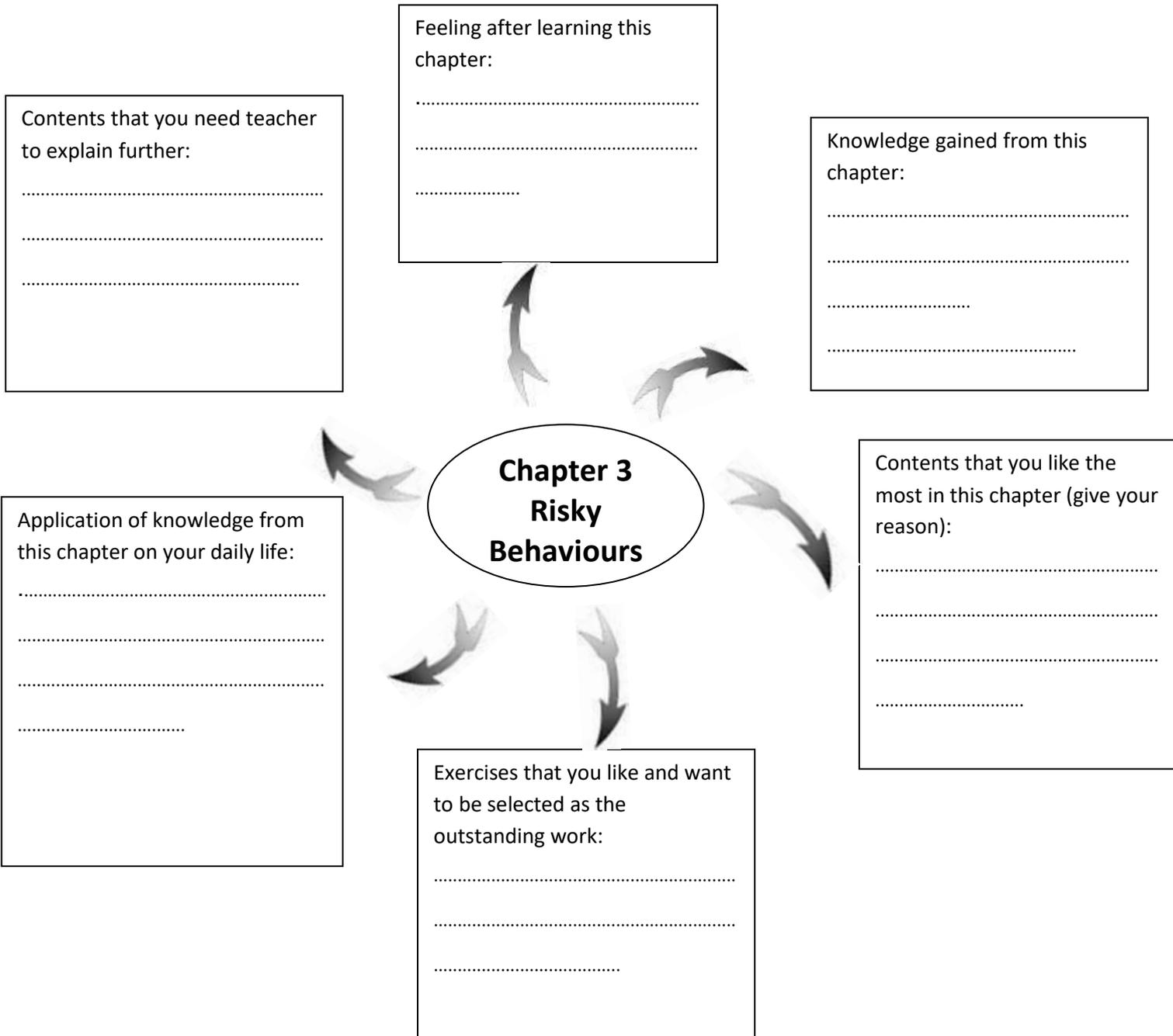
Learning Outcome Form

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..... **Date:**

Chapter 3 Risky Behaviours

Explanation: Summary of learning outcomes



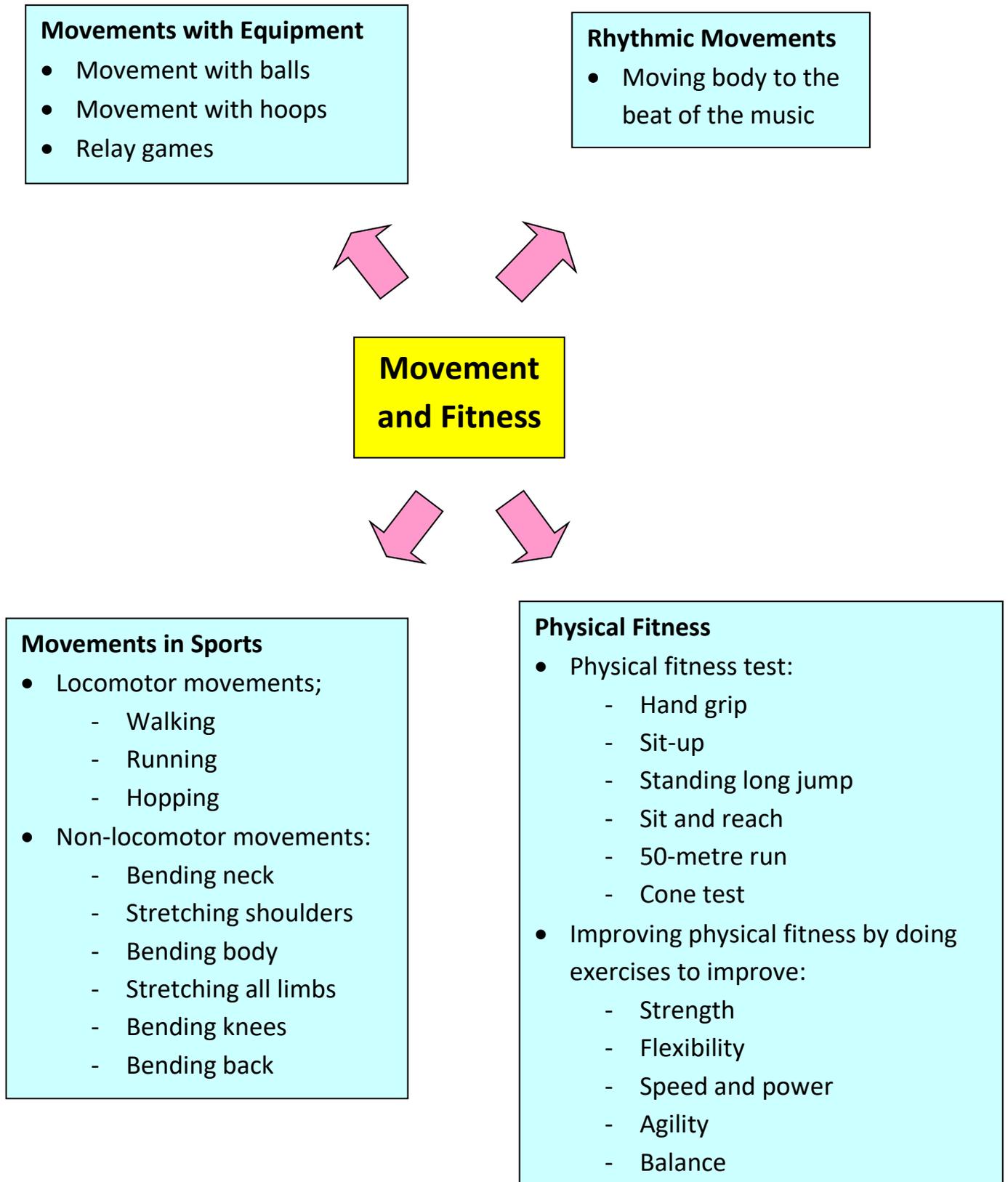
Chapter 4 – Movement and Fitness

Indicators and learning areas (13 hours)

Indicator	Learning Area
H3.1 Gr6/1 Can show kinesthetic skills with others in relays and in integration while standing, moving and using equipment and movements attuned to songs.	<ul style="list-style-type: none">• Movements in sports• Movements with equipment• Rhythmic movements
H3.1 Gr6/2 Classify kinesthetic principles regarding accepting and using force and balance of body movements in playing sports, and apply results for improving and increasing their practices and those of others.	<ul style="list-style-type: none">• Movements in sports• Movements with equipment• Rhythmic movements

<p>H3.2 Gr6/1 Explain the benefits and principles of doing physical exercise for health, physical capacity and personality strengthening.</p>	<ul style="list-style-type: none"> • Physical fitness
<p>H3.2 Gr6/2 Play games requiring planning skills and able to increase skills for physical exercises and movements on a systematic basis.</p>	<ul style="list-style-type: none"> • Movements in sports • Movements with equipment • Rhythmic movements
<p>H4.1 Gr6/4 Continuously strengthen and improve physical capacity for health.</p>	<ul style="list-style-type: none"> • Physical fitness

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand movements and control themselves when using kinaesthetic skills.
2. Understand how to control movements regarding accepting and using force and balance.
3. Understand physical fitness.

Learning Outcomes

Students will be able to:

1. Classify kinaesthetic principles regarding accepting and using force and balance of body movements in playing sports.
2. Increase skills for physical exercises and movements on a systematic basis.
3. Improve physical fitness.

Learning Areas

- Movements in sports
- Movements with equipment
- Rhythmic movements
- Physical fitness

Teaching and Learning Activities

1st – 4th hours (Movements in Sports)

1. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
2. The first activity is ‘Throwing a ball into a basket’. The instructions are in Activity Corner 1 on page 43. Ask the students to answer the questions on page 43 in their notebook.
3. The second activity is ‘Kicking and stopping ball’. Follow the instructions in Activity Corner 1 on page 43 to do this activity. Ask the students to answer the questions on page 44 in their notebooks.
4. Explain briefly to the students about the importance of balance in sports.
5. The balancing activity is ‘Standing on one leg’. Follow the instructions in Activity Corner 2 on page 45. Ask the students to answer the questions on page 46 into their notebooks.
6. Explain to the students briefly about non-locomotor movements. Then, do some exercises with the students.
7. The exercises are:
 - (a) Bending our neck
 - (b) Bending our body
 - (c) Stretching our shoulders
 - (d) Bending
 - (e) Stretching all limbs
 - (f) Bending knees

Use the illustrations on pages 46 to 48 as a guide for the exercises above.

8. Play a game focusing on non-locomotor movements with the students. This is a game that encourages everyone to bend and move. The game requires the students to touch the parts of their bodies as they are

singing a rhyme. As the children become more confident with the actions then the rhyme can be sped up. This is how the rhyme goes:

Heads and shoulders,
knees and toes, knees and toes.
Heads and shoulders,
knees and toes, knees and toes.
And eyes and ears, and mouth and nose.
Heads and shoulders,
knees and toes, knees and toes

9. Ask the students to think of any other non-locomotor movements.
10. Explain to the students briefly about locomotor movements. Then, do some exercises with the students.
11. The exercises are:
 - (a) Walking
 - (b) Running
 - (c) Hopping

Instruct the students to do the movements for a distance of 5 metres.

12. Play a game called 'Traffic Lights'. This activity is based on the three traffic light colours of red, amber and green. Each colour called out determines what the students should be doing:
 - (a) Red – standing still
 - (b) Amber – running on the spot
 - (c) Green – running around the room
13. Once the students have got used to the three traffic light colours, other things could be added such as:
 - (a) Roundabout - must run round in a small circle

- (b) Speed bump - jump in the air before running on.
- (c) Reverse - run backwards
- (d) Traffic jam - run slowly
- (e) Road clear (used after traffic jam) - run around normally

There are lots of possibilities and the students might like to think of their own ideas to add.

14. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

5th - 7th hours (Movements with Equipment)

1. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
2. Explain to the students that objects or equipment can be made use for playing or doing exercise. For example, balls and hoops.
3. Play 'Tag the ball' with the students. The instructions are in Activity Corner 3 on pages 50 and 51.
4. For a game of movement with hoops, play the game 'Going through hoops' with the students. Follow the instructions in Activity Corner 4 on page 52.
5. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

8th hour (Relay Games)

1. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
2. Explain to the students that relay games require teamwork, coordination and concentration.

3. Play the game ‘Pant rally’ with the students. Follow the instructions in Activity Corner 5 on pages 52 and 53.
4. Play ‘Three legged race’ with the students. Tie each leg of two players together. The instructions are similar to the ‘Pant rally’ game.
5. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

9th hour (Rhythmic Movements)

1. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
2. Explain to the students that rhythmic movements are movements of the body following the beats of music.
3. Play music that has four distinctive beats. Ask the students to move their heads to the beat. Refer to pages 53 and 54. Make the music faster to challenge the students.
4. Once the students have mastered the movements, make the movements more challenging. Refer to pages 54 and 55. Increase the music to make it more challenging for the students.
5. Ask the students to complete the task in Activity Corner 6 on page 55.
6. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

10th – 12th hours (Physical Fitness)

1. Explain to the students about physical fitness. A physically fit person is active and able to do daily activities without getting tired.
2. Conduct a physical fitness test for the class. Carry out the following tests:

- (a) Hand grip - test for strength
- (b) Sit-up - test for strength (**Caution: This activity must be done on an exercise mat to prevent injury.**)
- (c) Standing long jump - test for speed and power
- (d) Sit and reach - test for flexibility
- (e) 50-metre run - test for speed and power
- (f) Cone test - test for agility

Follow the instructions on pages 56, 57, and 58.

3. Ask the students to do a report on the physical fitness test as shown in Activity Corner 7 on pages 62 and 63.
4. They can refer to the tables on page 59 to determine their fitness.
5. Inform the students that physical fitness can be improved by doing exercises every day.
6. Teach the students some exercises to improve their physical fitness.
7. Start with warm-ups. Do some bending and stretching. It helps to improve flexibility. Refer to the illustration on page 60.
8. Then, teach the students these exercises that can improve strength:
 - (a) Sit-up (**Caution: This activity must be done on an exercise mat to prevent injury.**)
 - (b) Push-up
 - (c) Jumping jack
 - (d) Chin-up
9. Next, teach the students these exercises that can improve strength:
 - (a) Sprinting up stairs
 - (b) Basic sprint
10. After that, do these exercises with the students to improve agility:
 - (a) Feet drill with ladder
 - (b) Snake-move

Refer to the illustrations on page 61.

11. Balance can be improved by ‘Standing on one leg’ and ‘Walking on a balance beam’.
12. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

13th hour (Conclusion)

1. Do a quick summary of this chapter with students.

Emphasized Skills:

1. Teamwork
2. Fitness
3. Sportsmanship

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Balance beam
3. A few balls
4. Stopwatch
5. Exercise mats
6. Cones
7. Stool
8. Strength dynamometer
9. Radio (for music)
10. Hoops
11. Basket
12. Measuring tape



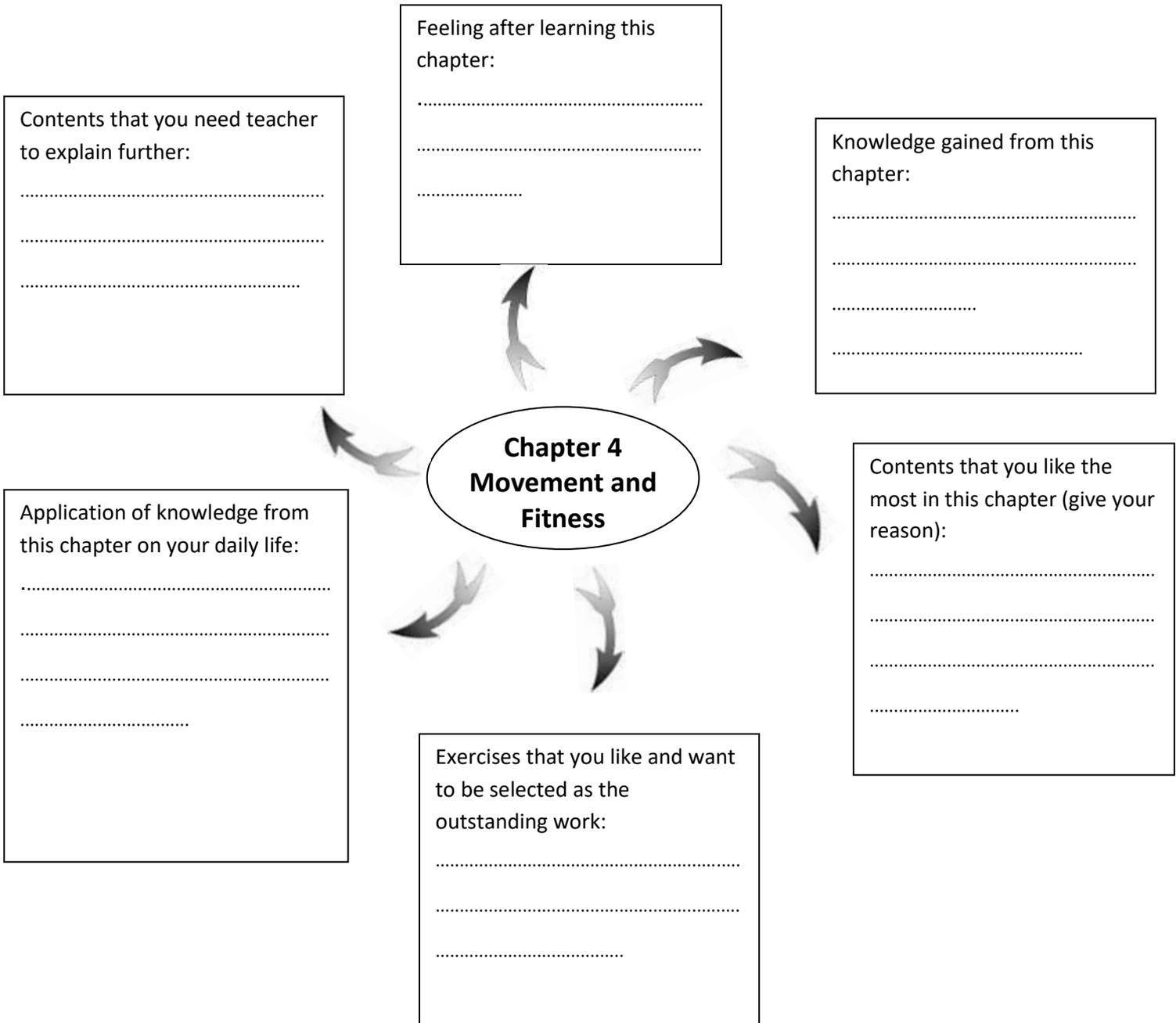
Learning Outcome Form

Name-Surname: No. Prathomsuksa:

..... Date:

Chapter 4 Movement and Fitness

Explanation: Summary of learning outcomes



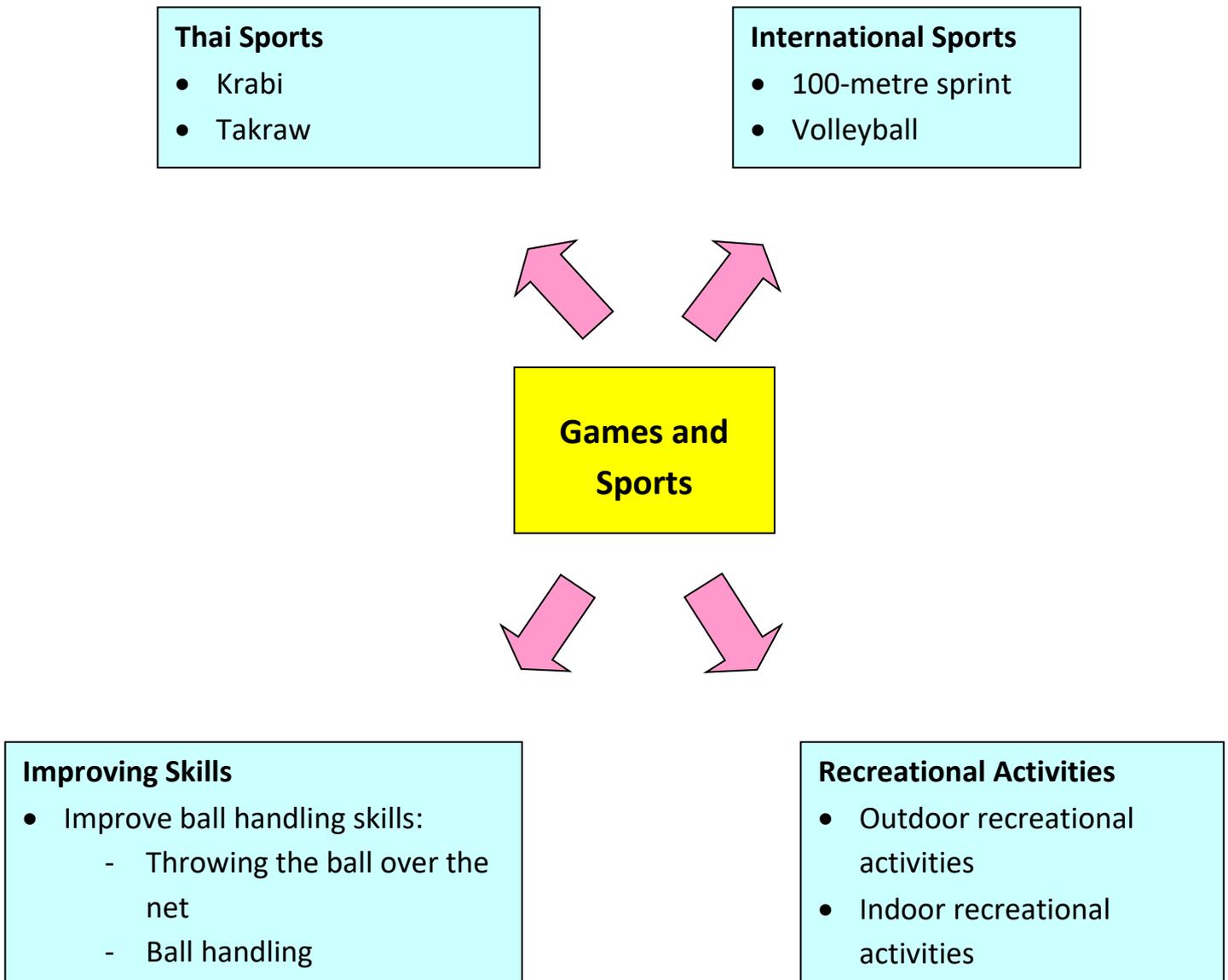
Chapter 5 – Games and Sports

Indicators and learning areas (14 hours)

Indicator	Learning Area
H3.1 Gr6/3 Can play Thai and international sports as individuals and in teams, one of each kind.	<ul style="list-style-type: none"> • Thai sports • International sports
H3.1 Gr6/4 Use mechanical skills for improving and increasing their own capacities and those of others in playing sports.	<ul style="list-style-type: none"> • Improving skills
H3.1 Gr6/5 Participate in at least one recreational activity and apply the knowledge or principles obtained as a basis for studying and seeking knowledge about other matters.	<ul style="list-style-type: none"> • Recreational activities
H3.2 Gr6/3 Play their favorite sports and able to regularly asses their own playing skills.	<ul style="list-style-type: none"> • Thai sports • International sports
H3.2 Gr6/4 Observe rules and regulations of the respective kinds of sports played, bearing in mind their own safety and that of others.	<ul style="list-style-type: none"> • Thai sports • International sports

<p>H3.2 Gr6/5 Distinguish offensive and defensive strategies and apply teams in playing sports.</p>	<ul style="list-style-type: none"> • Thai sports • International sports
<p>H3.2 Gr6/6 Play games and sports in unity and have sporting spirit.</p>	<ul style="list-style-type: none"> • Thai sports • International sports

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand the principles of Thai and international sports.
2. Understand the rules and regulations of Thai and international sports.
3. Understand the importance of improving skills in playing sports.

Learning Outcomes

Students will be able to:

1. Play Thai and international sports as individuals and in teams, one of each kind.
2. Play at least one recreational activity.
3. Observe rules and regulations of playing games and Thai and international sports.
4. Improve skills.

Learning Areas

- Thai sports
- International sports
- Improving skills
- Recreational activities

Teaching and Learning Activities

1st – 5th hours (Thai Sports)

1. The students must learn at least one individual and at least one team Thai sports.
2. The Thai individual sport to teach the students is Krabi.
3. Elaborate on the sport. Emphasise on the swords and the movements.
4. Show the students pictures of the swords used in Krabi and the way it is held.
5. Show the students a video of the less-movement dance of sword dancing in Krabi:
 - (a) Saluting the king in Thai style
 - (b) Sitting Brahma
 - (c) Standing Brahma
6. Explain briefly about the movements above. Refer to pages 65 to 69.
7. Now, show the students a video of the more-movement dance of sword dancing in Krabi:
 - (a) Zigzag walking (Loy Chai)
 - (b) Hitting steps (Mai Dtee)
8. Explain briefly about the movements above. Refer to pages 70 and 71. Make sure that the students are familiar with all the movements and steps.
9. Now that the students have seen the movements in Krabi, let them practise the movements.
10. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.

11. Give each student a fake sword. Ask the students to make two straight lines facing you and make sure that they are at least an arm length away from the person next to them. Instruct the students in the front row to take 5 steps forward to create a safe distance between the front row and back row.
12. Now, ask the students to do all the movements they have watched on video earlier.
13. Check the students each time to make sure that they are doing the techniques correctly.
14. The Thai team sport to teach the students is Takraw.
15. Explain to the students about Takraw. Focus on the players, court and ball. Refer to page 72.
16. Ask the students to draw the diagram of the Takraw court on page 72 in their notebook. Make sure that the students remember the location of the service circle.
17. Before the students can learn how to play Takraw, they must first learn the rules of the game. Explain to the students about the Takraw game. Elaborate on the scoring, passing the ball, the positions of the players in the court and determining the winner. Refer to pages 73 and 74. Emphasise to the students on the importance of knowing the rules and regulations of any game or sports before playing.
18. Now that the students are familiar with the rules of Takraw, it is time to teach them the basic techniques of Takraw.
19. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
20. Give each student a Takraw ball and ask them to stand in a big circle. Make sure that the students have a distance of at least an arm length away from each other.

21. These are the basic techniques in a Takraw game:

- (a) Inside kick
- (b) Front kick
- (c) Knee kick
- (d) Header

Demonstrate each of these basic techniques to the students. Make sure that they are doing the techniques correctly. Correct the students if they did any mistake. Refer to page 72.

22. For the next lesson, have a Takraw game for the students. Let them get the experience of playing a Takraw game with scoring, rules and referees.

23. Ask the students to complete the task in Activity Corner 1 on pages 75 and 76.

24. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

6th – 11th hours (International Sports)

- 1.** The students must learn at least one individual and at least one team international sports.
- 2.** The international individual sport to teach the students is 100-metre sprint.
- 3.** Give the students a brief introduction to the sport.
- 4.** Explain the phases of the sprint:
 - (a) On your mark
 - (b) Set
 - (c) Go!

Refer to page 77.

5. Show the students a video of a 100-metre sprint race. Let them observe the body movements of the sprinters.
6. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
7. Do a 100-metre sprint race for the students. They must follow the proper technique. (**Caution: Make sure that the warming up and cooling down exercises are done to prevent muscular cramps**)
8. The international team sport to teach the students is volleyball.
9. Ask the students to draw the diagram of the volleyball court on page 79 in their notebook. Make sure that the students remember the location of the attack line.
10. Explain to the students that one must know the rule before playing a game. Emphasise on the importance of following the rules when playing. Let the students know that the rules prevent injuries from happening and to make sure the game is played fairly.
11. Ask the students to read the rules of volleyball on page 80 and explain about it to them. Then, do a short quiz to make sure the students are well versed with the rules.
12. Explain to the students on how a volleyball game is played. Show the students a 5-minute video of a volleyball game. Let them get an idea of how the game is played on the court.
13. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
14. Ask the students to form two horizontal straight lines. Make sure that there are equal numbers of students in each line. Next, tell them to spread out their arms (as if as flying) to create some distance between each other. Instruct the students in the front row to take 5 steps forward to create a safe distance between the front row and back row. Make

sure the students in the front and back row are facing each other. The person standing in front of them will be their partner.

15. Teach the students about the basic techniques in volleyball, which are:

- (a) Serving
- (b) Passing
- (c) Setting
- (d) Attacking/Spiking
- (e) Digging

Demonstrate each of these techniques to the students. Correct the students if they do mistakes. Refer to pages 78 and 79.

16. After that, let the students practise the basic techniques. Watch them carefully and help anyone who struggles or does mistakes.

17. Ask the students to complete the task in Activity Corner 2 on pages 81 and 82.

18. For the next lesson, organise a volleyball game for the students. Let them play the game with scores, rules and a referee.

19. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

12th hour (Improving Skills)

1. Explain to the students that improving skills can help us play better in sports. Focus on ball handling skills.
2. Conduct these physical activities on a field or in a hall. Ensure students wear suitable clothes and shoes for these activities.
3. Do these activities with the students to improve their ball handling skills:
 - (a) Throwing the ball over the net
 - (b) Ball handling

Refer to pages 82 and 83 for instructions.

4. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

13th hour (Recreational Activities)

1. Ask the students what they know about recreational activities. Guide them to understand that there are outdoor recreational activities and indoor recreational activities.
2. Ask the students to give examples of outdoor and indoor recreational activities.
3. Advise the students do always go for recreational activities because they bring a lot of benefits. Suggest some benefits of recreational activities. Refer to page 85.
4. Give example of recreational activities such as quoits and beadwork.
5. Divide the students into groups and ask them to describe a recreational activity to the class.
6. Ask the students to complete the task in Activity Corner 4 on page 86.
7. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

14th hour (Conclusion)

1. Do a quick summary of this chapter with students.

Emphasized Skills:

1. Team spirit
2. Patience
3. Observing
4. Sporting spirit

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Fake swords
3. Takraw ball
4. Volleyball
5. Pictures
6. Videos
7. Cones



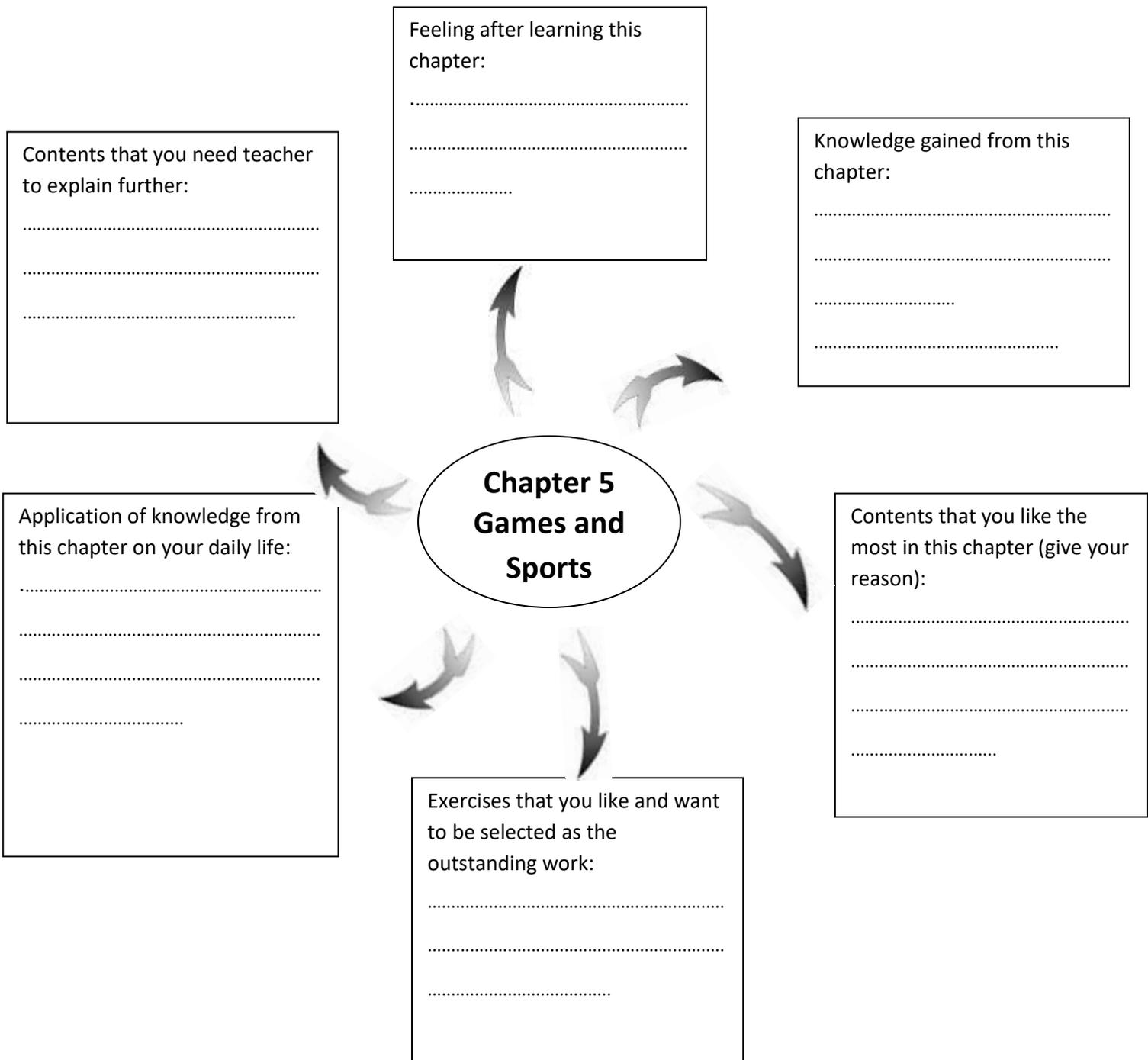
Learning Outcome Form

Name-Surname: No. Prathomsuksa:

..... Date:

Chapter 5 Games and Sports

Explanation: Summary of learning outcomes

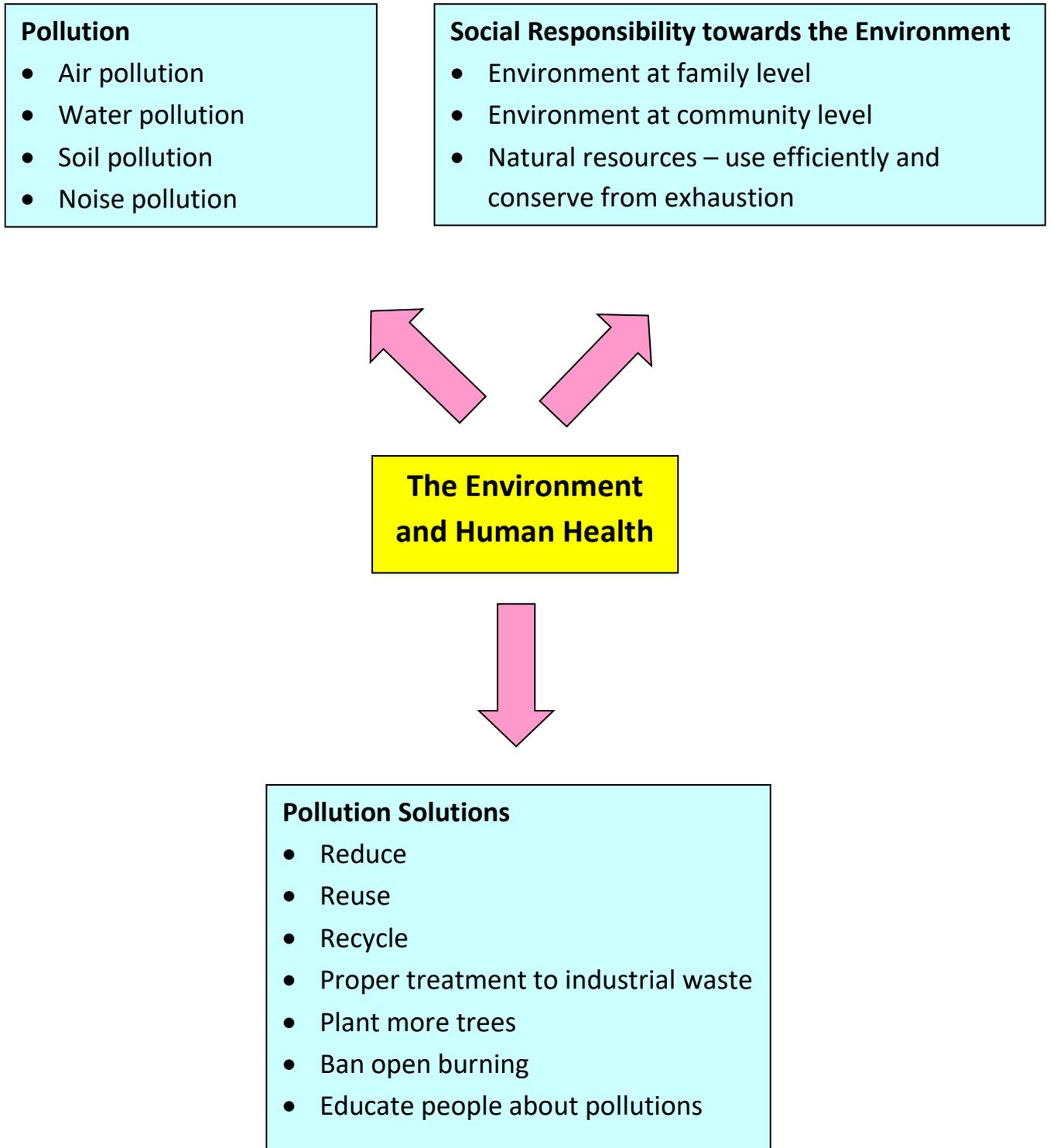


Chapter 6 – The Environment and Human Health

Indicators and learning areas (9 hours)

Indicator	Learning Area
H4.1 Gr6/1 Show behaviours for preventing and solving environmental problems affecting health.	<ul style="list-style-type: none">• Pollutions• Pollution solutions
H4.1 Gr6/3 Show behaviours indicating responsibility for health for all.	<ul style="list-style-type: none">• Social responsibility towards the environment

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand the effects of pollution on health.
2. Understand the importance of solving environmental problems.

Learning Outcomes

Students will be able to:

1. Know how to reduce, reuse and recycle.
2. Be responsible towards taking care of the environment.

Learning Areas

- Pollutions
- Pollution solutions
- Social responsibility towards the environment

Teaching and Learning Activities

1st – 2nd hours (Pollution)

1. Bring a picture of an old tree to the class. Tell the class that the tree has been standing for many years, but now it is dying.
2. Tell them that the tree has been working hard for many years to produce oxygen for humans. It does not receive enough sunlight because the leaves of the tree are now covered in soot and dust. Air pollution is the cause.
3. Tell them that the tree is thirsty. Its roots cannot find clean water anymore. Water pollution is the cause.

4. Tell the students that the tree is poisoned. It cannot take nutrients from the soil which is contaminated by industrial waste. Soil pollution is the cause.
5. Finally, tell the students that all the animals that used to live on the tree have ran away. The sounds from the honking cars, low flying airplanes, and machinery from a construction site nearby have scared away the animals. Sound pollution is the cause.
6. Show the picture of a dead tree. Tell the students that this is the same tree which has now died because of pollution.
7. The tree is a living thing. Pollution has destroyed the tree. We humans are also living things and pollution is currently destroying us. Ask the students, do they want to end up like the tree?
8. Explain to the students about pollution. Talk about:
 - (a) Air pollution
 - (b) Water pollution
 - (c) Soil pollution
 - (d) Noise pollution

Refer to pages 87 to 89.

9. Ask the students to discuss with a partner about the effects of pollution on health and the environment.
10. Ask the students to complete the task in Activity Corner 1 on page 90.
11. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

3rd – 6th hours (Pollution Solutions)

1. Show the students a map of the world. Ask:
“Where do you think the biggest rubbish dump in the world is?”
2. Take the students suggestions and possibly plot on the map. Ask:
“What type of garbage do you think there is most of in the biggest garbage dump? Why?”
3. If the students have not already identified the Eastern Garbage Patch, show them where it is on the map. Ask:
“Does it surprise you that the biggest garbage dump is in the ocean?”
4. Explain that the Easter Garbage patch is an area of floating rubbish made of plastic in the central North Pacific Ocean. It is said to be larger than the United States continent.
5. Ask the students about the three Rs. What does it stand for? How can it be applied in daily life? Inform the students that the three Rs stand for ‘Reduce’, ‘Reuse’ and ‘Recycle’.
6. Explain to the students that to reduce means to use fewer things that will end up as waste. Let the students discuss on ways to reduce and write it down in their notebook.
7. Then, explain to the students that to reduce means to use an item over and over again before it really becomes a waste. Ask the students if they ever reuse their things before throwing it away. Do they reuse plastic bags? Do they reuse their plastic bottles?
8. Let the students think of ways to reuse things and write it down in their notebook.
9. Show the students a picture of the recycling bins. Do they know what is it?

10. Why are the recycling bins different colours? What do the colours mean? What are the items that can be recycled?
11. Help the students understand the colour code of the recycle bins:
 - (a) Blue – for paper products
 - (b) Brown – for glass products
 - (c) Orange – for cans and plastic products
12. Advise the students to recycle unwanted things instead of throwing it away.
13. Give the students a pair of gloves. Walk throughout the school and collect any rubbish or unwanted things that may be recycled. Then, drop off these items into a recycling bin.
14. Ask the students to bring recyclable or reusable unwanted things from home such as old newspapers, plastic bottles, sweet wrappers and more. Let the students use their creativity to make a product using the recyclable and reusable things. They may make a doll, a card or even a mask.
15. Ask the students to complete the task in Activity Corner 2 on page 94.
16. Show the students a video on how dangerous chemicals from industrial waste are treated before disposal.
17. Besides the three Rs, explain to the students that there are other ways to fight pollution. Give examples and suggestions. Refer to pages 94 and 95.
18. Ask the students to complete the task in Activity Corner 3 on page 96.
19. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

7th – 8th hours (Social Responsibility towards the Environment)

1. Inform the students that we have a social responsibility towards the environment. The responsibility can be carried out at family level and community level.
2. Explain to the students that taking care of the environment at family level begins at home. Refer to page 97.
3. Ask the students how they can show their responsibility towards the environment at family level.
4. At the community level, explain to the students that everyone has to help keep the surrounding areas clean.
5. Ask the students to discuss on ways they can help the environment at a community level. Refer to page 98.
6. Show the students a video about the natural resources and how it is depleting.
7. Based on the video ask the students to:
 - (a) List examples of natural resources
 - (b) Give the importance of natural resources
 - (c) The uses of natural resources
 - (d) Ways to use natural resources efficiently
 - (e) Ways to conserve natural resources
8. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

9th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 100, 101 and 102 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Observing
2. Generating ideas
3. Inventing
4. Visualising

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Pictures of trees, recycling bins
3. Videos of managing industrial waste and natural resources
4. Gloves
5. Recyclable materials (newspapers, aluminum cans, sweet wrappers, etc)



Learning Outcome Form

Name-Surname: **No.** **Prathomsuksa:**

..... **Date:**

Chapter 6 The Environment and Human Health

Explanation: Summary of learning outcomes

Contents that you need teacher to explain further:
.....
.....
.....

Feeling after learning this chapter:
.....
.....
.....

Knowledge gained from this chapter:
.....
.....
.....

**Chapter 6
The Environment
and Human
Health**

Contents that you like the most in this chapter (give your reason):
.....
.....
.....
.....

Application of knowledge from this chapter on your daily life:
.....
.....
.....
.....

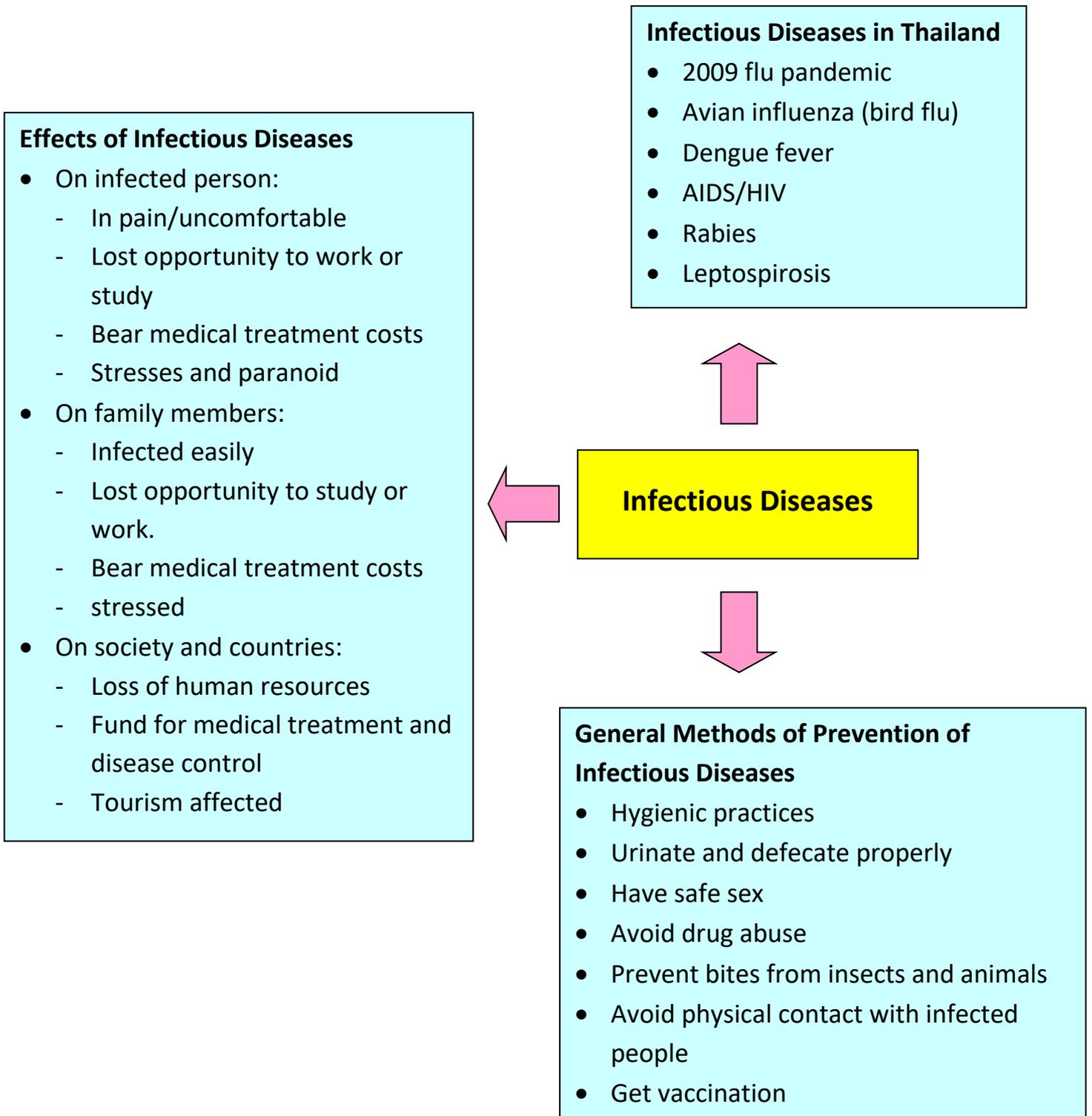
Exercises that you like and want to be selected as the outstanding work:
.....
.....
.....

Chapter 7 – Infectious Diseases

Indicators and learning areas (8 hours)

Indicator	Learning Area
H4.1 Gr6/2 Analyse effects from spreading of diseases and propose guidelines for preventing important communicable diseases in Thailand.	<ul style="list-style-type: none"><li data-bbox="1082 719 1299 882">• Infectious diseases in Thailand<li data-bbox="1082 987 1283 1151">• Effects of infectious diseases<li data-bbox="1082 1256 1378 1480">• General methods of prevention of infectious diseases

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand the effects of spreading diseases.
2. Understand the importance of preventing the spread of infectious diseases.

Learning Outcomes

Students will be able to:

1. Know the infectious diseases in Thailand.
2. Know the effects of infectious diseases.
3. Practice habits to prevent infection of diseases.

Learning Areas

- Infectious diseases in Thailand
- Effects of infectious diseases
- General methods of prevention of infectious diseases

Teaching and Learning Activities

1st – 5th hours (Infectious Diseases in Thailand)

1. Explain to the students about infectious diseases. Refer to page 103.
2. First tell the students about the 2009 flu pandemic or H1N1 flu.
Describe the symptoms and give the methods of prevention. Give the students a demonstration on how to wash our hands properly. Refer to pages 104 and 105.
3. Ask the students what they know about avian influenza, or better known as bird flu.

4. Explain to the student about bird flu. Describe the symptoms and give the methods of prevention. Refer to page 106.
5. Show the students the picture of an Aedes mosquito. Let the students observe the distinctive black and white stripes on the mosquito. Inform the students that this mosquito transmits germs that cause Dengue fever.
6. Describe the symptoms of Dengue fever and give suggestions on how to prevent the spread of this disease. Refer to page 107.
7. Play the students a video from the AIDS Awareness Campaign and give them some pamphlets about AIDS.
8. Explain to the students about AIDS and how it is brought upon by HIV. Describe the symptoms of AIDS/HIV and inform the student the methods of prevention. Refer to pages 108 and 109.
9. Ask the students if they have any pets. Now ask them if their pets have been given vaccination against diseases, especially rabies.
10. Let the students know that rabies is a deadly disease among animals and can be transmitted to humans when bitten or scratched by an infected animal.
11. Explain to the students about the symptoms of rabies. Let them know the methods of prevention. Refer to pages 109 and 110.
12. Elaborate on the disease leptospirosis. Focus on how it is spread, the symptoms and also the methods of prevention. Refer to pages 110 and 111.
13. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

6th hour (Effects of Infectious Diseases)

1. Explain to the students that infectious diseases bring effects on the person infected, family members and the society and countries.
2. Show the students the picture of a sick person. How does he look? Does he look happy? Does he look healthy? What do you think he feels?
3. Ask the students to discuss on how the infected person is affected by the infectious disease.
4. Then, ask them to imagine if they are sick. How do they think their family members are affected? Will they be sad? Will they be worried? Will they be able to carry out their daily activities normally?
5. Ask the students to discuss on how the family members of an infected person are affected by the infectious disease.
6. Inform the students on how infectious diseases affect the country and society. Refer to page 112.
7. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

7th hour (General Methods of Prevention of Infectious Diseases)

1. Pour four different colours of glitter dust into four separate plates. Choose four volunteers from the class. Ask each student to dip their hand into a plate. Now, their palms have glitter dust. Tell the students that the glitter on the hands of the students represent the germs on their hands. Ask the four students to shake hands with each other. Then, ask them to look at their palms and show it to the class. Their palms now have different coloured glitter dust.

2. Tell the students to imagine that the glitter dust on their hands is germs. This activity shows how easily germs are spread.
3. Ask the students to give ideas on how germs and infectious diseases can be prevented from spreading.
4. Give the students suggestions. Advise them to always keep clean and hygienic. Refer to page 112.
5. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

8th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 113, 114 and 115 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Visualising
2. Observing
3. Brainstorming

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Pictures of Aedes mosquito and sick people
3. Video on AIDS awareness
4. Pamphlet on AIDS awareness
5. Glitter dust



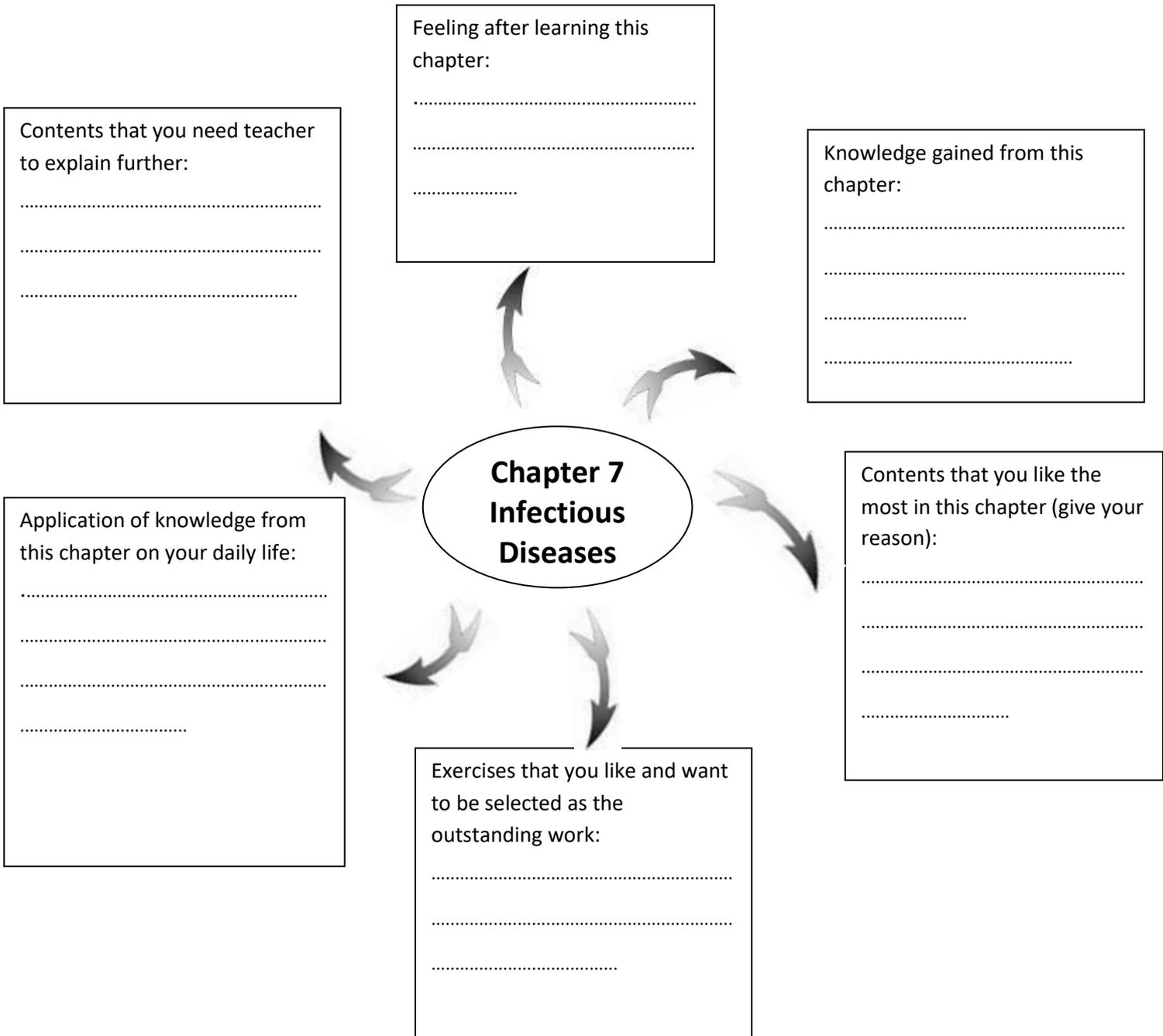
Learning Outcome Form

Name-Surname: No. Prathomsuksa:

..... Date:

Chapter 7 Infectious Diseases

Explanation: Summary of learning outcomes

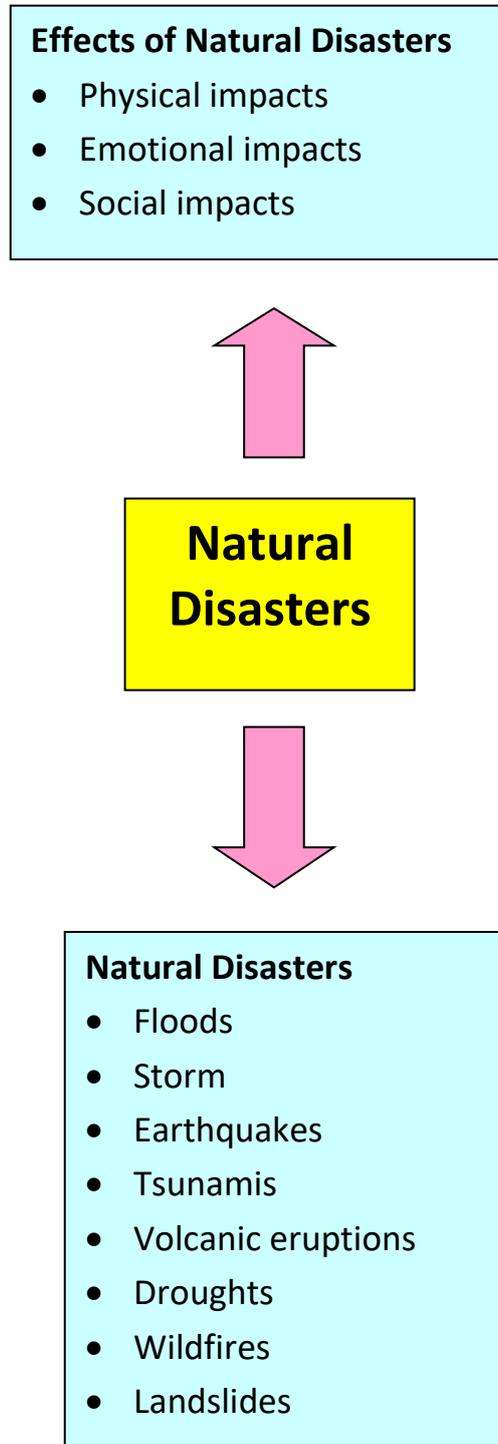


Chapter 8 – Natural Disasters

Indicators and learning areas (7 hours)

Indicator	Learning Area
H5.1 Gr6/1 Analyse effects of violence from natural disasters on the body, mind and society.	<ul style="list-style-type: none">• Effects of natural disasters
H5.1 Gr6/2 Specify self-conduct for safety from natural disasters.	<ul style="list-style-type: none">• Natural disasters

Conceptual Map



Learning Objectives

Students will be taught to:

1. Understand the destructive effects of natural disasters.
2. Understand the importance of being prepared for natural disasters.

Learning Outcomes

Students will be able to:

1. Be prepared to face natural disasters.
2. State the effects of natural disasters.

Learning Areas

- Natural disasters
- Effects of natural disasters

Teaching and Learning Activities

1st – 5th hours (Natural Disasters)

1. Explain to the students that natural disasters are very dangerous and that we should be prepared to face them.
2. These are the topics of natural disasters to explain to the students:
 - (a) Floods
 - (b) Storm
 - (c) Earthquakes
 - (d) Tsunamis
 - (e) Landslides
 - (f) Volcanic eruptions
 - (g) Droughts
 - (h) Wildfires

3. Show the students pictures of a flood. Ask the students if any of them had ever been in a flood. Ask the student to relate his or her experience to the class. Explain to the students on how to prepare for a flood by referring to page 117.
4. Show the students pictures of a thunderstorm and a cyclone. Let the students observe the situation in the pictures. Explain to them about storms. Teach the students how to prepare for a storm. Refer to pages 117 and 118.
5. Have the students use the Internet or library to find background information about earthquakes. Their findings should be able to answer the questions below:
 - (a) Why do earthquakes occur?
 - (b) What happens underground during an earthquake?
 - (c) What happens above ground during an earthquake?
 - (d) Where do earthquakes tend to occur? Why do they occur in these areas?
6. Ask the students to pretend that an earthquake has just occurred. Explain to them that depending on how far from the centre of the quake they are, people get enough time to reduce the chance of serious injury. Here are some ideas:
 - (a) If you are in a lift, you would get out of it.
 - (b) If you are near a desk, you would get under it.
 - (c) If you are on a bus, you would hold tight onto a strap or rail.
 - (d) If you are standing by a cliff, you would move away.
 - (e) If you are driving a train, you would slow down or stop.
 - (f) If you are riding a bike, you would get off it.
 - (g) If you near a building site, you would move away from large cranes.
 - (h) If you were cooking a meal, you would turn off the heat.

7. Invite students to add to the list. Be inventive. Ask them to spend some time thinking about how they would respond right now in the classroom, and in different circumstances.
8. Divide the students into five groups. Have each group research one major earthquake that has occurred recently. How did the earthquake affect people's lives? Was the community prepared for such an earthquake?
9. Have students create an "Earthquake Preparedness" poster or brochure explaining what people should know about earthquakes in order to be well prepared. Include information about how individuals and families can prepare for an earthquake. Refer to page 119.
10. Show the students a video of a tsunami hitting a beach. Let them observe how fast the waves managed to create so much destruction.
11. Advise the students that they should prepare in advance for tsunamis. They should also know what to do in case of a tsunami. Refer to page 121.
12. Bring the students attention to other natural disasters such as volcanic eruption, drought, wildfire and landslide. Elaborate on the general steps to prepare for any natural disasters. Refer to pages 122 and 123.
13. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

6th hour (Effects of Natural Disasters)

1. Show the students pictures of natural disasters. These pictures must highlight the property damage as well as the loss of lives.
2. Ask the students what they feel when they see these pictures. Do they feel sad? Do they notice the destruction of the buildings? Do they notice the dead bodies?

3. Tell the students that there are many negative impacts after a natural disaster. These effects leave physical, emotional and social impacts.
4. Ask the students to discuss about the impacts of natural disasters and categorise them into the three categories of physical impact, emotional impact and social impact. Refer to pages 123 and 124.
5. Ask the students to complete the task in Activity Corner on page 124.
6. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

7th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 125 and 126 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Observing
2. Visualising
3. Evaluating
4. Problem solving

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Pictures of natural disasters
3. Videos of natural disasters



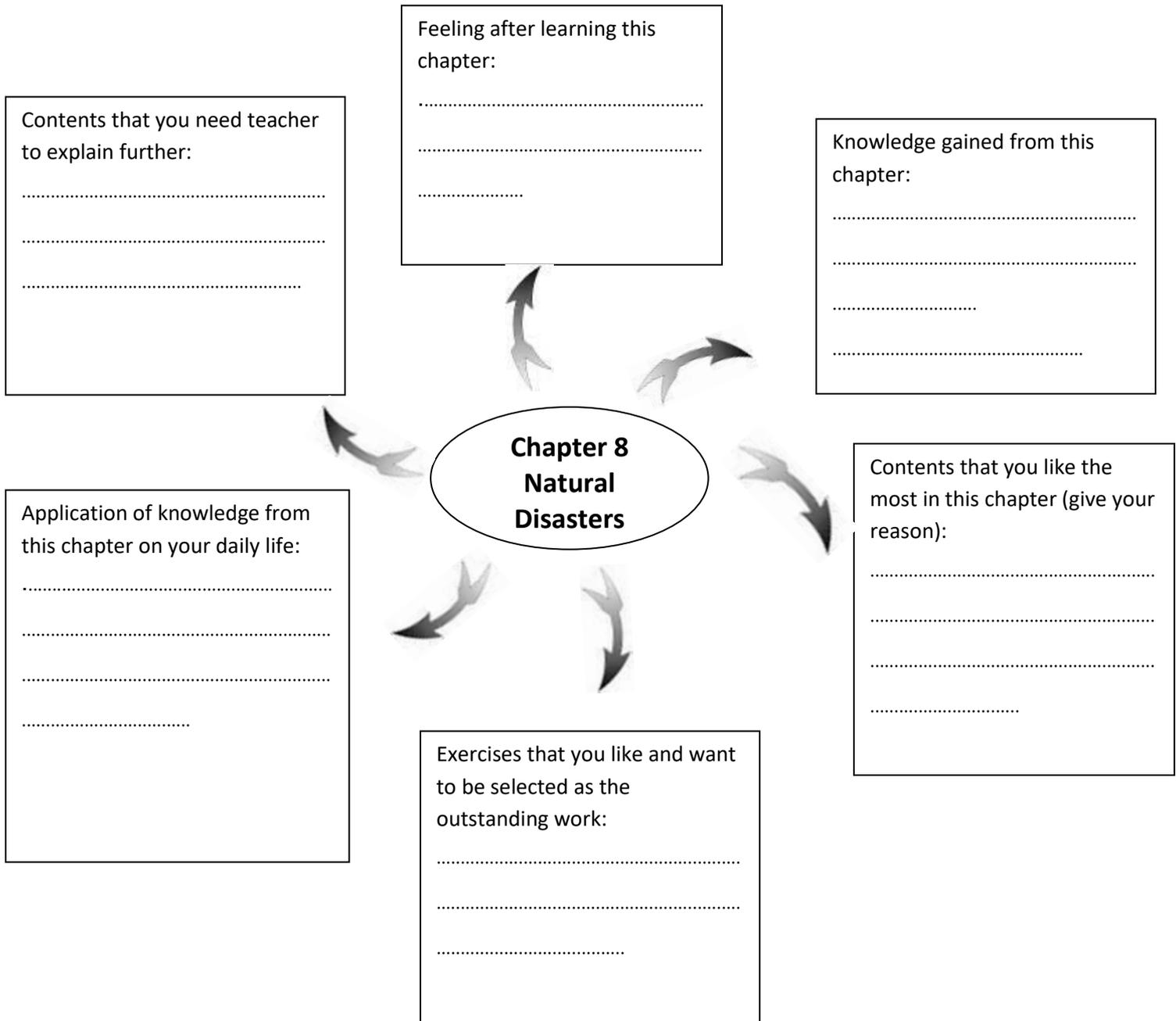
Learning Outcome Form

Name-Surname: **No.** **Prathomsuksa:**

Date:

Chapter 8 Natural Disasters

Explanation: Summary of learning outcomes



Chapter 9 – Drug Addiction

Indicators and learning areas (5 hours)

Indicator	Learning Area
H5.1 Gr6/3 Analyse causes of addiction to drugs and persuade others to avoid the use of drugs.	<ul style="list-style-type: none">• Causes of drug addiction• Harmful effects of drug addiction• How to prevent drug addiction

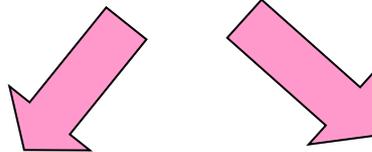
Conceptual Map

Causes of Drug Addiction

- Curiosity
- Peer pressure/social
- Abuse by strangers
- Family or financial problems
- Environment



Drug Addiction



Harmful Effects of Drug Addiction

- Effects on the drug addict
- Effects on family members
- Effects on society

How to Prevent Drug Addiction

- Youth
- Family
- School
- Society

Learning Objectives

Students will be taught to:

1. Understand the factors influencing drug addiction and its effects.
2. Understand the roles played in preventing drug addiction.

Learning Outcomes

1. Students will be able to:
2. Know the causes of drug addiction.
3. Know the effects of drug abuse.
4. Prevent themselves from drug addiction.

Learning Areas

- Causes of drug addiction
- Harmful effects of drug addiction
- How to prevent drug addiction

Teaching and Learning Activities

1st hour (Causes of Drug Addiction)

1. Show the students a picture where people are using drugs. Let the students observe the picture.
2. Ask them why they think the people in the picture are using drugs?
3. Let the students discuss and give their ideas.
4. Guide the students to these causes of drug addiction:
 - (a) Curiosity
 - (b) Peer pressure/social
 - (c) Abuse by strangers
 - (d) Family or financial problems
 - (e) Environment

5. Explain to the students how the causes for drug abuse above manage to bring about addiction to drugs. Refer to pages 126 to 129.
6. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

2nd hour (Harmful Effects of Drug Addiction)

1. Show the students the picture of a drug addict. Ask the students what they see. Does the drug addict look healthy? Do they think the drug addict has a happy life? Do they think people like seeing the drug addict?
2. Ask the students to write down their feelings towards drug addicts. Do they like drug addicts? Do they feel that drug addicts are a burden?
3. Guide the students to understand that their feelings towards drug addicts are the effects of drug addiction on society.
4. Explain to the students that the effects of drug addiction on society include increased crime rate, lack of human resources and expenditure of government funds. Refer to page 130.
5. Show the students the picture of the drug addict again. Ask them to observe the physical condition of the addict. What do they see?
6. Explain to the students that addiction to drugs can cause deterioration of health, illnesses, emotional disturbances, abnormal behaviour, and ultimately death. Refer to page 129.
7. Elaborate on the effects of drug addiction to family members. Refer to page 130.
8. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

3rd – 4th hours (How to Prevent Drug Addiction)

1. Explain to the students that drug addiction is a serious problem and must be prevented.
2. Elaborate that drug prevention begins with education and involves:
 - (a) Youth
 - (b) Family
 - (c) School
 - (d) Society

Refer to pages 130 to 132.

3. Ask the students to write a short essay on how they can help in preventing drug addiction.
4. Ask the students to make a brochure or pamphlet on the ways to prevent drug addiction. They can make the brochure or pamphlet as creative as possible.
5. Guide students to conclude this subtopic and prepare a conceptual map in their notebook.

5th hour (Conclusion)

1. Do a quick summary of this chapter with students.
2. Ask students to work on Fun Exercises on pages 133, 134, 135 and 136 to test their understanding of this chapter as their homework.

Emphasized Skills:

1. Observing
2. Brainstorming
3. Evaluating
4. Visualising

Learning Materials:

1. Primary Education Smart+ Health and Physical Education P6
2. Pictures o drug addicts
3. Colour papers
4. Colour pencils/Crayons



Learning Outcome Form

Name-Surname: No. Prathomsuksa:

..... Date:

Chapter 9 Drug Addiction

Explanation: Summary of learning outcomes

Contents that you need teacher to explain further:
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Feeling after learning this chapter:
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Knowledge gained from this chapter:
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Contents that you like the most in this chapter (give your reason):
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Exercises that you like and want to be selected as the outstanding work:
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Application of knowledge from this chapter on your daily life:
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