



LESSON PLAN TEMPLATE: INDIRECT METHOD

Grade: 4

Learning Area: Natural Science and Technology

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LESSON PLAN TEMPLATE: INDIRECT METHOD

Grade: 4

Learning Area: Natural Science and Technology

Topic: The water cycle 1

SILENT SITTING:

Light a candle and ask learners to focus on the candle and gently close their eyes. Take a few slow, steady breaths (in and out). Think about that part of your brain where your talent and creative abilities are kept. Think of that place in your brain as being like a flower - as you breathe in, imagine that the breath is caressing the flower like a soft gentle breeze. As it touches the flower the flower starts to open slowly petal by petal until it's fully open. This flower represents Mother Earth and all her resources - plants, animals, oceans, rivers, birds, flowers and insects. In this moment you know that you will be different, all your life you will protect Mother Earth and all her resources, and you will teach all of humanity to do likewise. Now that that flower is open, open your eyes and you are ready to begin with your work.

VALUE: Love, Right Conduct, Non-violence

SUB VALUE: Caring for Mother Earth and our natural resources

CONTENT:

A) AS PER CURRICULUM *(May use your required template as per National protocol or this part)*

Note to educator: Please add content from a CAPS Natural Science and Technology textbook. (CAPS: South Africa National Curriculum and Assessment Policy Statement)



LESSON PLAN TEMPLATE: INDIRECT METHOD

B) INTEGRATION:

1. *Within Learning Areas*

Learners bring a glass jar, cotton wool and bean seeds because they grow the fastest (to school). Place some seeds in the cotton wool that has been dampened with water and make moist. Educator to make a glass jar with seeds and cotton wool and place it in a separate classroom with light and water but without any silent sitting exercises, music or meditation. Place plants alongside the windowsill where there is light, learners can water the plants and observe their growth. Also, these plants must be in the classroom where there is music, silent sitting and meditation daily. Ask the students that when they are in silent sitting to concentrate on sending loving feelings to the plants in their room (and not to the plants in the other room) i.e. Love. The pupils must compare the growth of the plants in the two rooms over time:

1. What do the pupils observe in the differences in the growth of the plants?
2. What does it take for humans to grow, thrive and flourish?
3. What leads to us being sad, angry, depressed, tired, despondent and unmotivated?
4. Learners to make a vision board or a pie graph to depict all the different aspects we require to develop holistically?

2. *Between Learning Areas:*

1. Watch the movie Avatar (or parts of it depending on time available) which aptly portrays man's greed and destruction of the resources of Mother Earth without considering the long-term effects on humanity, the environment and earth which are all interconnected. From a spiritual point of view the film showed the connection of Mother Earth, the environment and humanity - man can only survive by working in harmony, unity and balance and not by destroying the ecosystem which is very fragile.
2. Growing your own organic food garden (of vegetables, fruit and herbs using seeds and bulbs from the garden). Also, you can create your own compost in a corner of your garden with all the peels and offcuts from the fruit and vegetables that your parents use to cook.
3. Take seeds from vegetables and fruit, bulbs of onions, potatoes and sweet potatoes to name but a few and plant them in old flower pots or in your garden depending on the space you have (recycle, reduce and reuse programme).
4. Buy seeds of flowers or collect the seeds of flowers like marigolds, the cosmos, or sunflowers and plant them in spring using compost.



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5. Some plants grow from slips or cuttings like the rose plant- place them in water and when the roots and shoots emerge use compost and plant them.
6. Very interesting to show the learners how to balance an avocado seed with matches in a glass of water and you can plant it in compost when the roots start to grow.
7. Support the Checker's plant project - ask your parents to buy groceries from Checkers to get your plants free.
8. The Sai Centres are also giving out free seeds to start your own organic gardens.
9. Plant indigenous trees like the Spekboom tree which creates far more oxygen for us, uses less water, is suitable for all climates and seasons, weather conditions, you can eat the leaves, has a light citrus flavor, used for dehydration and exhaustion if you are stuck in the dry, arid conditions of the Karoo. Is called Elephant Bush and it is food for black Rhinos, Kudu and Elephants.
10. The class to be creative and to make their own tree of life which will be placed on the wall of the classroom and they can add pictures, photos and words to symbolise our lives and show how interconnected we are with Mother Earth, our environment and the universe,
11. Collect and throw all seeds into the fields and gardens because part of our problem with global warming - deforestation is that we have lost too many trees.
12. Pupils can make a bird feeder using a milk carton or a plastic two litre bottle.

3. Into The Universe/ Cosmos/ Creation

1. To plant and grow the seeds we need the right items; we have to give them time to grow to reach their full potential and we never give up.
2. Your development is a normal process (acceptance of yourself and not comparison with others) - to develop your own self-esteem and self-concept.
3. It's very difficult to raise a child," It takes a village to raise a child," and the phrase, "the hand that rocks the cradle rules the world. "We need to implement the principles of Ubuntu- "I am because we are". We need to show gratitude to God, our teachers, family, friends and Mother Earth.
4. The seeds need water, soil, air, sun and love for growth (God, Earth, parents, teachers and friends) - interdependence and gratitude (Ubuntu).



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5. Each seed will grow in its own time and have its own purpose and identity just like individuals, family and society.
6. How is it possible for a tiny seed to grow into a plant or huge tree - all parts of the plant are inside the seed. Power of the supreme power of creation - embrace the divinity within you and others.
7. Significance of the tree of life and the movie **Avatar**.

C) SELF REFLECTION:

1. We need to be well prepared.
2. We need patience and care for plants and seeds to grow.
3. To be responsible to water and take care of plants.
4. To collect extra water at home to use in the garden because we have water restrictions due to lack of rain and drought conditions in certain parts of SA.
5. Place plants in the garden once they are growing well.
6. Hope that plants, flowers and trees grow well.
7. Learn to follow a healthy diet of fruit, vegetables and water.
8. Draw pictures of plants as they develop and grow.

A Prediction:

“World peace will come when more than half the people in the world have love in their hearts. The change will start slowly and increase exponentially until suddenly this group of people will reform the critical mass of people and will outnumber those with hatred and anger. This will happen and change will happen.”

Beautiful Quotation-

“A teacher is anyone who plants the seed of knowledge in you and waters it with her experience.”



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Grade: 4

Learning Area: Natural Science and Technology

Topic: The water cycle 2

SILENT SITTING:

Meditation with the Sounds of Water and the Ocean.

Pupils must slowly close their eyes and breath in and out slowly. Picture the Earth, the oceans, streams and rivers and they are clear and calm on a beautiful, sunny day. Birds are drinking from the clear waters, the fish are swimming in the cool waters, the plants and trees are green, and the flowers are in full bloom. You live in this beautiful village but one day all the trees around your village have been cut down, all the rivers and streams run dry and all the fruit, plants and vegetables start dying. There is not a cloud in the sky, and it does not rain anymore. Eventually there is no food or water for the people in the village. Everything is dry and desolate. The people start praying for rain, for food and they beg Mother Earth to provide for their needs. They promise that they will not be greedy, and they will not waste food and water ever again. Also, that they would respect the earth and the natural resources she provides us with. You may open your eyes slowly.

VALUE: Love, Right Conduct, Non-violence

SUB VALUE: Caring for Mother Earth and our natural resources

CONTENT:

A) AS PER CURRICULUM (*May use your required template as per National protocol for this part*)

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LESSON PLAN TEMPLATE: INDIRECT METHOD

B) INTEGRATION:

1. *Within Learning Areas*

1. Children are always happy and cheerful and thrive in an environment of love, positive affirmations and culture. Life starts with love, love for their parents, siblings, teachers, community, pets, the natural environment and the universe. Psychologists have always said that the first six years of a child's life forms the core of their personality. Parents need to maintain a very good environment at home even though it can be very challenging at times. The child's school has a great impact on creating and molding these children because as Swami says, "Education must instill the fundamental human values. Education must promote ethical behaviour. It must foster self-control. This is the essential function of Education."
2. Children learn to be warm, friendly and positive even in challenging times.
3. To learn the academic knowledge and curriculum with the integration of educational and human values.
4. Good listening skills - one learner or the educator speaks at a time.
5. Teachers can be creative and inventive- use resources available and their life experiences to create fun-filled diverse lessons with outcomes that can be achieved realistically. Ensure that the classroom environment is conducive to learning.
6. Children respect their differences and to listen to different viewpoints.
7. To take care of the home, class and school environment- respect our resources and each other.
8. Learn the benefits of silent sitting, calming music, prayer and meditation.
9. Teamwork brings us greater success than always concentrating on our own individual success.
10. As Swami says, "The lesson for students today is that they should follow the sacred path of righteousness. They should work for the welfare of society. Students should cultivate three qualities. They should cherish love for all living beings, they should cultivate all good qualities, they should acquire all useful knowledge. Love is the basis for these three qualities." (Sathya Sai Speaks, Volume 31)
11. Learning across learning areas



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2. *Between Learning Areas:*

- a. In what ways can we recycle water in our homes?
- b. Use the concept of the water cycle to illustrate how we can recycle seeds in our home gardens.

3. *Into The Universe/ Cosmos/ Creation*

The water cycle illustrates the interrelationship between the different elements of water, sun, air, space and earth to ensure that there is a sufficient and steady supply of this precious resource on earth. In the same way, people must also work together and cooperate with each other to make this world a better place in which to live.

c) SELF REFLECTION:

Children should be taught to live like the lotus in the lake, being in the water and yet unaffected by it. The lotus cannot survive when out of the water yet it will not allow the water to destroy it nor will it be affected or touched by the mud or soil. As Swami says, “Be in the world but see that the world is not in you”. That is the secret of successful living that we do not teach our children.

Technology - to build a model of the water cycle not bigger than A3 size. (Using the recycle, reduce and reuse programme – No new items allowed)



LESSON PLAN TEMPLATE: INDIRECT METHOD

Grade: 4 (Term 3)

Learning Area: Natural Science and Technology

Topic: Energy and Change, Energy for life

SILENT SITTING:

Light a candle for the children to observe and use a globe of the earth (or a balloon or ball that is golden or yellow in colour) - ask the children to imagine that they are in a golden circle (which represents security, unity, peace, purity and love). Remember that the other learners are all in their golden circle and you may bump into each other but that no one can enter your golden circle. You are in your own special place - feel this golden light envelope you completely and you feel unique, loved, calm, serene and peaceful. In this circle all your negative feelings of feeling sad, lonely, unloved, worried and anxious will disappear completely. Do not open your eyes and while you are in your golden circle listen to the meaning of this practice. In China people use harmony spheres that make harmonious tunes as they are held in their hands and moved around as a means of reducing stress, and brings about their own harmony in the universe.

VALUE: Love, Right Conduct, Non-violence

SUB VALUE: Caring for Mother Earth and our natural resources

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LESSON PLAN TEMPLATE: INDIRECT METHOD

B) INTEGRATION:

1. *Within Learning Areas*

1. The sky - Teaches us to think big, to expand our vision and to allow our mind to journey beyond the horizon. Even though there are storms and winds the sky remains clear and unpolluted. That's how our minds should be - clear, calm, stable despite challenges and victories.
2. Clouds- they fill the dams, rivers, streams and oceans- they give selflessly to sustain the green earth, animals, plants and humanity. We too should have respect for Mother Earth and our environment and help to sustain life on earth for all its creatures.
3. Rivers – we must have gratitude and admiration for the abundant rivers which also help to sustain life on earth, humanity and all its creatures.
4. Ecological Cycle - Every species depends on each other- they are a vital part of the ecosystem and every creature is interconnected and we depend on each other for our very survival (even with humanity we are dependent on each other and on Mother Earth).
5. Trees – The greatest of nature's teachers, teaches us patience as we watch them in winter when they appear to have died, sudden leaves and shoots in spring. In full bloom and then the beautiful fruits that grow and ripen with the sun's energy. Nature is beautiful and everything happens naturally, and we can learn to be selfless and giving and spread warmth, positivity and love.
6. Seeds - Seeds when planted, never stop growing and it reaches out to the sky and that is how we should be - approach life with calm steadiness and we should always be motivated to grow positively.
7. Sunrise and Sunset - Sunrise brings with it the hope of another day filled with new opportunities and challenges, love, innocence, purity and hope. Sunsets say it's time for all of us to rest and regain our energy with God's eternal presence until the next day.
8. Insects - The bee and the ant show us the wonderful lessons of sharing and working together and the wonderful lesson of Ubuntu- "I am because we are."



LESSON PLAN TEMPLATE: INDIRECT METHOD

2. *Between Learning Areas:*

1. Be patriotic but don't criticize other countries.
2. Believe in all cultures and respect them.
3. Recognise humanity - love all and serve all.
4. Keep your house and surroundings clean to lead a better, healthier life.
5. Help people with food, clothing and jobs to reduce begging.
6. It's a crime to give a bribe or to take a bribe.
7. Don't stoop to envy, jealousy or hatred and never harm anyone.
8. People who cannot do their own work will not be able to serve society.
9. Don't commit sin, observe the laws of the land-always portray love.
10. Show harmony of thought, word and deed.

c) **SELF REFLECTION:**

“Man’s misadventures have created several problems for the entire mankind, He has polluted the five elements causing havoc on earth. There is pollution everywhere - in the air, water, food and so on. His misdeeds coupled with his evil thoughts and feelings have degraded human life on the earth. If man acts in a righteous way there will be no pollution at all.” **Sathya Sai Summer Showers 15/5/2000**