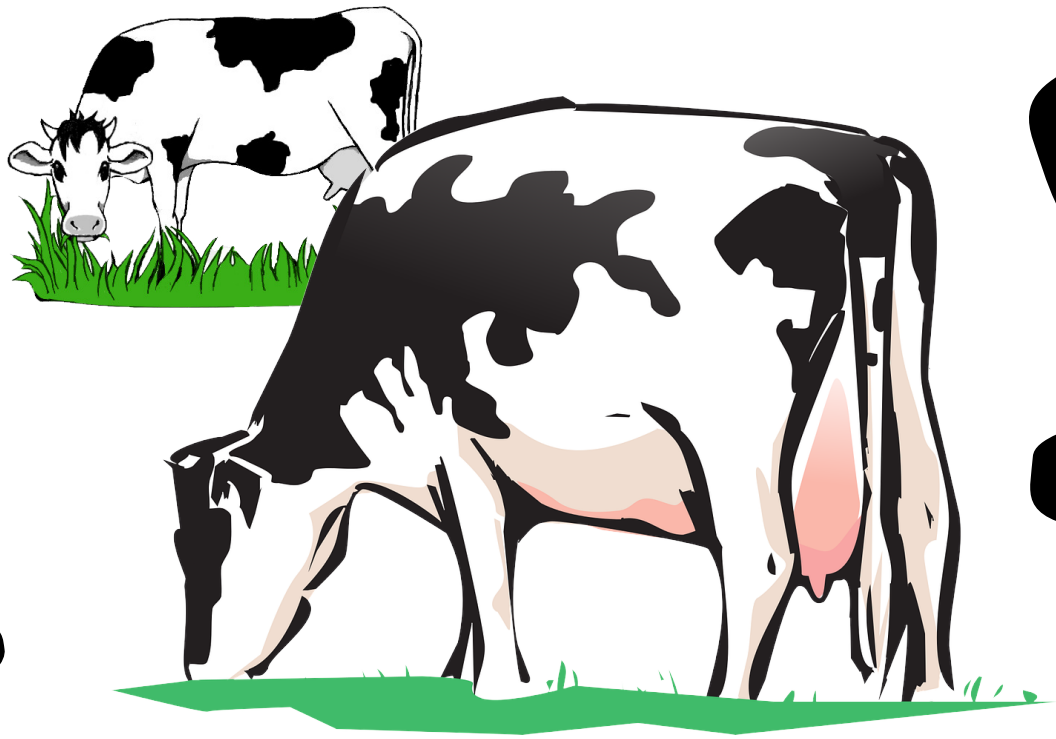
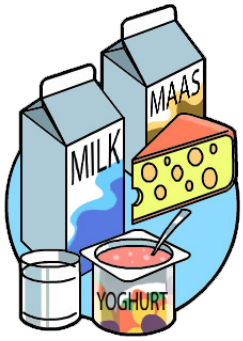
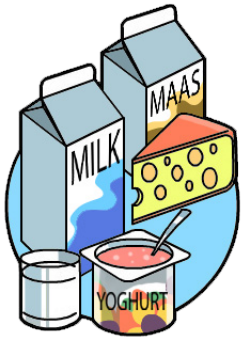
Recycling Art Challenge

Dairy for a healthy me and a healthy planet!



Teacher's Guide
Criteria and Challenge Guidelines Booklet





Grade 5

Developed for the Consumer Education Project of Milk SA

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General Guidelines:

Topic introduction

Use the nutritional message of the Consumer Education Project of Milk SA during teaching time to inform learners about the importance of dairy.

Dairy in our daily diet -

1. All dairy contains nine important nutrients we should consume daily.
2. Three servings of dairy will give you most of the bone-building mineral calcium you need daily.
3. Dairy products are all very nutritious.
4. Some products like yoghurt and cheese have less lactose than milk but are just as tasty! These fermented products are suited for people with lactose intolerence.

Art challenge introduction

- Collect empty dairy product packaging such as empty milk sachets, plastic containers, cups, bottles or bags, bottle lids, etc. and upcycle them into art.
- Learners must wash all the collected packaging with soap and water and allow it to air dry completely.
- Learners are to create artwork from recycled dairy packaging material.
- Learners must be innovative and creative. Learners participate individually.
- Educators must select and group the participating learners according to their grades.
- Educators must guide the selected groups to create artistic pieces from recycled dairy packaging materials.
- Learners are expected to do the work alone.

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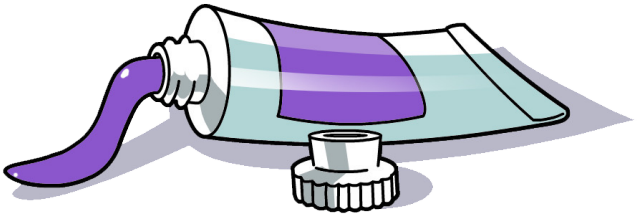
Grade 5 Art Challenge Category
Landscape - Farm or Milking Parlour

- Learners participate individually.
- Learners must create a garden item – a planter.
- Learners must use recycled dairy packaging such as dairy or milk sachets, plastic containers, cups, bottles or bags, bottle lids, etc.
- Items for decoration can also be used, such as:
  - Pom poms
  - Paint
  - Pipe cleaners
  - Wool
  - Jewel stickers
  - Straws
  - Beads
  - Buttons
  - Tissue paper
  - Items from nature such as sticks, leaves or sand.
  - Old sunglasses
  - Old hair accessories.



- Learners must use strong craft or wood glue to create the art piece.
- Educators are to use the rubric included tomark submissions.

Lesson Plan 1

Activity: Create a classroom collection point for recyclable dairy product containers.

In this activity, teachers will create a central point for collecting recyclable dairy product containers in their classroom.

What you will need:

1. A large, old box or any large container suitable for collecting and storing recyclable dairy product containers.
2. Large sheets of A3 paper.
3. Coloured markers, pencils or crayons.

How to teach the lesson:

Obtain a large box or container. Divide the learners into groups and each group is to create 'poster labels'. Put the label information on the board so learners can copy it onto their poster labels.

Instructions:

1. The educator must place the learners into groups of 3 or 4. Ensure each group has a piece of A3 paper and coloured markers, pencils or crayons.
2. Learners must create a label for the large box or container. The label should read, 'Clean, dry containers go here'.
3. Learners can also create and place posters around the school to promote and encourage the collection. The signs can read, 'We need your help to recycle!' The learners can write the information and decorate by drawing pictures of yoghurt containers, milk bottles, cheese wrappers etc. Learners can even stick dairy product packaging onto the posters to create a 3D poster.
4. Learners must be guided to stick up the posters in appropriate locations around the school.
5. Educators must ensure that the collection begins as soon as possible.

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Lesson Plan 2

Activity: How long does it take for garbage to decompose?

In this activity, educators will inform learners how long it takes different types of garbage to decompose.

What you will need:

1. The garbage decomposition information provided.
2. The worksheet provided.
3. The YouTube video links provided.

How to teach the lesson:

The educator begins the lesson by asking the learners questions about garbage, garbage dumps and garbage decomposing. Answers can be written on the board. The educator must then use the information provided to inform the learners about garbage decomposing or breaking down.

Educators are to introduce the concept of garbage breaking down or decomposing. They must ask the learners for examples of items that are found in garbage dumps. Then, ask the learners to guess which items will decompose quickly and which will take longer.

Instructions:

1. The educator must gather the learners to sit at their desks.
2. The educator guides a discussion with the learners by posing the following questions:
   a. What happens to all the garbage in the garbage dump?
   b. What are examples of items that are thrown away and considered garbage?
   c. Did you know that all our garbage eventually breaks down? This is called decomposing.
   d. Which items will decompose quickly and which will take longer?
3. The educator is to provide examples to support the discussion.

How long does it take for garbage to decompose?

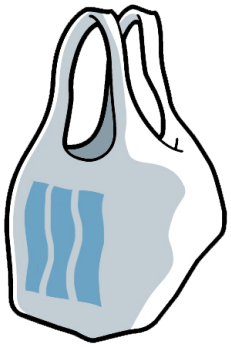
When we throw something in the garbage, it may seem like it's gone forever. But it starts a process where the item breaks down or decomposes.

For example, if we have leftover salad, it can return to the Earth and become part of it again in just a few days. But the plastic container that held the salad can take thousands of years to break down. So, it's important to consider what we throw away and how it can affect the environment.

Different things break down or decompose at different speeds. Some factors that affect how fast something breaks down include:

- ☑ How hot or cold it is.
- ☑ How wet or dry it is.
- ☑ If it's in the sun or not.
- ☑ If there are tiny living things called microorganisms around.
- ☑ If it's buried in the ground or not.

Let's look at a few everyday items and determine how long they decompose.



Plastic takes around 20 to 500 years to decompose. How fast it decomposes depends on the type of plastic and things like sunlight.

A body's bones start to break down after about nine months. It takes a long time, about 10 to 1000 years, for the bones to fully decompose. The weather during different seasons and if other animals or insects can get to the body affect how long it takes.

Chewing gum takes a really long time to break down completely, around 500 to 1,000 years. It doesn't decompose like other things because bacteria and living organisms can't break it down. The UV light from the sun breaks the gum into tiny pieces called microplastics.

Paper breaks down in about 2 to 6 weeks because it's made from natural materials. The good news is that paper is one of the things we can recycle really well. It can be used to make new paper products over and over again, up to 6 times!

Styrofoam (polystyrene) is a material that is made from fossil fuels and harmful chemicals. The problem is that it doesn't break down naturally and is not biodegradable, which means it stays around forever.

The time it takes for leaves to break down can depend on how much air or oxygen they get, how wet they are, what kind of leaves they are and the ratio of green leaves to brown leaves. Putting leaves in a compost bin usually takes about 3 to 6 months for them to decompose.

Disposable nappies are a big problem! They are the third most common thing thrown away by people and it takes them around 500 years to break down. As they break down, they release gases like methane that harm the environment.

After eating a banana, the peel it leaves behind doesn't break down quickly. It can take several months for a banana peel to decompose. But here's the good news: banana peels are great for composting or putting in the garden. If you compost a banana peel under the right conditions, it should take about 3 to 4 weeks to break down.

Cardboard is a versatile material that can be used in many ways. You can compost it, use it as mulch in your garden, or get creative and repurpose it for crafts or as bedding for pets. When cardboard is used as mulch or shredded and soaked to break down, it biodegrades quickly. Most of the cardboard will completely break down within three months.

It takes a really long time for aluminium to break down, around 80 to 100 years. In fact, it can take several centuries for aluminium to decompose fully. But here's something cool about aluminium: it can be recycled repeatedly without losing its quality.

Plastic straws have been getting a lot of attention from people who care about the environment and want to reduce plastic waste. It's not good news because plastic straws can take up to 200 years to break down. Instead, they break apart into smaller pieces called microplastics over time.

Toilet paper is something we use daily and it breaks down slower than you might think. It can take one to three years for toilet paper to decompose fully, especially if the conditions aren't ideal.

That's why it's important to consider how long something will stick around when we throw it away.

Adapted from: https://bit.ly/3poGkvl

To complete this activity, write down how many years the items in the table take to decompose.

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10 to 1000 years	3 to 6 months	500 years	1 to 3 years
Never	3 to 4 weeks	200 years	3 months

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Lesson Plan 3

Activity: Brainstorm ideas for a landscape of a farm or milking parlour made using dairy product containers.

What you will need:

1. Examples of a landscape of a farm or milking parlour constructed using dairy product containers.

   Educator can make their own example at home or school to bring in for a practical, 'hands-on' example.

2. A variety of clean and dry dairy product containers.

3. A selection of art decorations such as pom poms, stickers, pipe cleaners, shredded paper, ribbon, wool, string etc

   - ☑ This is optional. Educators must encourage learners to see what they have at home before spending money unnecessarily.
   - ☑ The emphasis is on recycling, so purchasing supplies is counterproductive to the theme.
   - ☑ Educator must provide alternatives to store purchased art supplies – using a two-hole punch to punch coloured paper can create confetti.
   - ☑ Educators to encourage learners to look to nature for materials too.

How to teach the lesson:

1. Educators must use pictures of landscapes of farms or milking parlours to show the learners and inspire some ideas.

2. An excellent example is a landscape of a farm or milking parlour created by the educator.

   a. This is a very good idea.

   b. The learners will respond very well to touching and holding a real-life example.

   c. Educators must use this opportunity to show how important it is to properly glue and/or staple the items and ensure their garden items are strong and of sturdy construction.

3. Educators can hold up dairy product containers and ask questions to spark the learners' imagination:

   a. Hold up a bottle top, for example, and ask the learners what that can be used for.

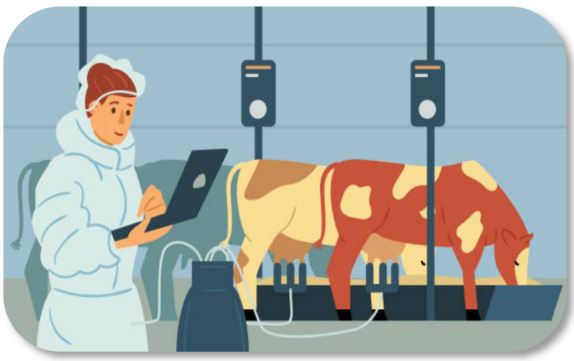
   b. Educators may write the answers on the board to create a mind map. Learners may also do the same.

c. Educators can ask the learners to come up and choose a dairy product container and then inform the class what that item can be used for.

4. Educators must instruct learners to draw their landscapes of farms or milking parlours on paper.

5. Learners must label their drawings and use that information to create a list of items they need to construct their landscapes of farms or milking parlours.

Examples of landscapes of farms or milking parlours:

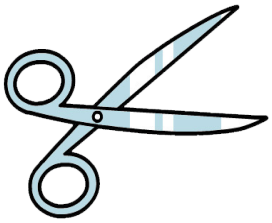


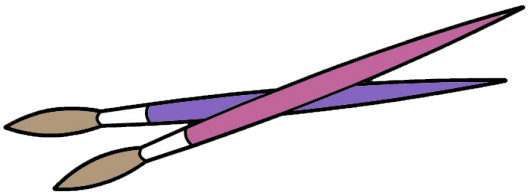
Lesson Plan 4

Activity: Create a landscape of a farm or milking parlour using recycled dairy product containers.

In this activity, educators will introduce the art project whereby learners will create a landscape of a farm or milking parlour using recycled dairy product containers. This activity aims to facilitate the learner's creation of an art piece that can be submitted to the MILKSA Art Challenge.

What you will need:





1. Clean, empty dairy product containers.
2. Scissors.
3. Glue – craft or wood.
4. Stapler and staples (optional).
5. Decorative items.
6. Coloured paper.
7. Paint and paint brushes.
8. Decorative or craft items.

How to teach the lesson:

Educators must oversee the learners while constructing a farm or milking parlour landscape. Educators must ensure that the learners have their design plan and that they follow it.

TOP TIP – Each class should choose to do the same landscape of a farm or milking parlour to make things easier for all involved.

1. Learners must be reminded about scissor safety.
2. Once all the components are prepared, learners must glue their components together. Learners must put old newspapers (or the equivalent) to protect the desks from damage.
3. Educators can provide pegs or clips to help the parts adhere to each other properly. Educators may also assist with stapling parts together for extra reinforcement.
4. Learners can also stick coloured paper or tissue to their landscape instead of paint.
5. Once everything is dry, learners can stick on decorative items such as stickers, pom poms, buttons, string, ribbon, wool, stickers, sequins, buttons etc.

6. Educators must create and provide each learner with a label that includes their name, surname and grade. This label must be secured to each learner's landscape.

Teacher's Resources

Draw a farm scene with barns river || Pencil Scenery Drawing Easy

https://bit.ly/3qY7IRo

How to DRAW a COW Easy Step by Step Farm Animal Drawing

https://bit.ly/3Jq49K8

Collage "Village scene"

https://bit.ly/42VVFBl

Lesson Plan 5

Activity: Enjoy Dairy

Milk and milk products are often considered beneficial for growing children for several reasons. Educators will inform learners about how dairy products benefit our diets in this activity.

What you will need:

1. The included information.
2. The included dairy product worksheet and memo.
3. The YouTube links are provided.

How to teach the lesson:

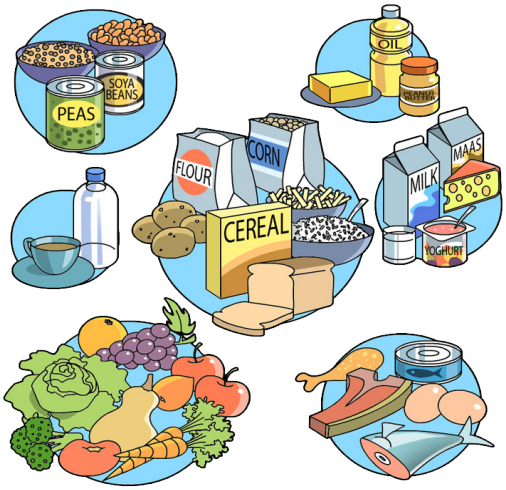
The educator must begin by asking the learners questions about dairy products. Educators can make notes on the board of the examples provided by the children. Once the discussion is complete, the educator must recap the benefits of consuming dairy as per the information provided in this document.

Instructions:

1. The educator must gather the learners to sit at their desks.
2. The educator guides a discussion with the learners by posing the following questions:
   - ☑ Is eating a healthy diet important?
   - ☑ Why is a healthy diet important? What will happen if you have an unhealthy diet?
   - ☑ Which foods do you think are healthy to eat?
   - ☑ Did you know that there are very important nutrients that our bodies need and that we should consume every day?
3. The educator must read through and teach the information provided about the nine essential nutrients our bodies need.
4. The educator must then inform learners how dairy products benefit our bodies and contain eight of the nine essential nutrients that we need daily.

The nine important nutrients that are commonly recognised as essential for our bodies and should be consumed daily are:

1. **Carbohydrates:** Carbohydrates are our bodies' primary energy source. They provide fuel for our muscles and brain. Good sources include whole grains, fruits and vegetables.
2. **Proteins:** Proteins are essential for the growth, repair and maintenance of tissues in our bodies. They are also involved in producing enzymes, hormones, and antibodies. Good sources include lean meats, poultry, fish, eggs, dairy products and nuts.
3. **Fats:** Fats are important for providing energy, insulating and protecting organs, and absorbing fat-soluble vitamins. Healthy fat sources include nuts, seeds, avocados, olive oil and fatty fish like salmon.
4. **Vitamins:** Vitamins are micronutrients required in small amounts for various bodily functions. They are crucial in growth, metabolism, immune function, and overall health. Different vitamins have different food sources, such as fruits, vegetables, whole grains and animal products.
5. **Minerals:** Minerals are also essential for various bodily functions, including bone health, nerve function, and fluid balance. Important minerals include calcium, iron, potassium, magnesium, and zinc. Food sources include dairy products, leafy greens, legumes, whole grains and nuts.



6. **Fibre:** Fibre is a carbohydrate not digested by the body but is crucial for maintaining healthy digestion and preventing constipation. It also helps regulate blood sugar levels and promotes a feeling of fullness. Good sources include whole grains, fruits, vegetables and nuts.
7. **Water:** While not a nutrient, water is vital for our bodies. It involves nearly every bodily function and helps maintain body temperature, transport nutrients, and eliminate waste products. Staying hydrated is important by drinking water and consuming foods with high water content, such as fruits and vegetables.
8. **Calcium:** Calcium is essential for strong bones and teeth and proper muscle and nerve function. Dairy products like milk, cheese and yoghurt are excellent sources of calcium. Leafy greens, fortified plant-based milk and calcium-fortified foods can be alternatives for those who avoid dairy.
9. **Iron:** Iron is necessary for producing haemoglobin, a protein in red blood cells that carries oxygen throughout the body. Good sources of iron include lean meats, poultry, fish, legumes, leafy greens and fortified cereals.

Maintaining a balanced and varied diet that includes a wide range of nutrient-rich foods is important to ensure an adequate intake of these essential nutrients. With the exception of fibre, dairy products contain all of these important nutrients.

Teacher resources

Healthy Eating: An Introduction for Children Aged 5-11

https://bit.ly/42SncUh

How to Make Healthy Food Changes

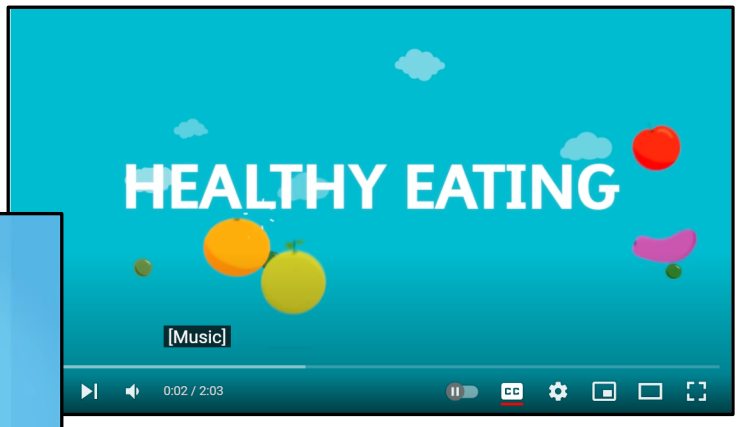
https://bit.ly/3JvqvKm

Why is junk food unhealthy? - Ask Coley - Health Tips for Kids | Educational Videos by Mocomi

https://bit.ly/3r0pm7f

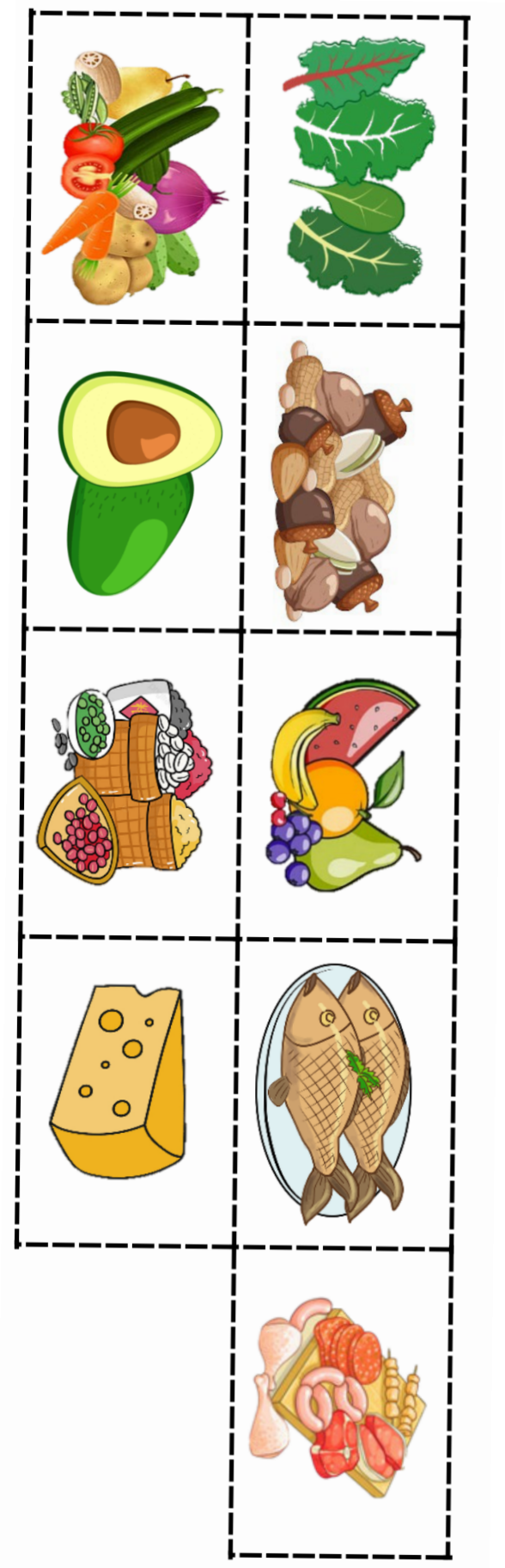
FOOD PYRAMID | How Different Foods Affect Your Body | The Dr Binocs Show | Peekaboo Kidz

https://bit.ly/3XoA9nB



Complete the following table by cutting and sticking the correct food example for each essential nutrient.

Essential Nutrient	Food
Carbohydrates	
Protein	
Fat	
Vitamins	
Minerals	
Fibre	
Water	
Calcium	
Iron	



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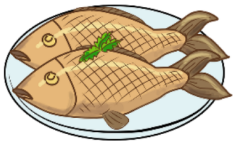
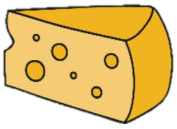
Memo

Essential Nutrient	Food
Carbohydrates	
Protein	
Fat	
Vitamins	
Minerals	
Fibre	
Water	
Calcium	
Iron	

Educator Resources:

Recycling Challenge Rubric

Name of the learner: _____

Grade: 5

Name of the School: _____

District/Circuit: _____

Province: _____

Category: Landscape of a Farm or Milking Parlour

	Excellent	Good	Average	Poor	Criteria not Met
Criteria:	**5**	**4**	**3**	**2**	**1**
1. Theme/Subject Matter/Category • The theme is clear and well-presented. • The project shows detail. • The learner has followed all instructions.					
2. Creativity • The art produced is original and shows |creativity. • All the graphics and objects used adhere to the design brief. • A good variety of materials have been included.					
3. Use of Dairy Product Packaging • There is evidence that dairy product has been used. • Packaging is identifiable; not entirely hidden by paint.					
4. Composition and Technical Level • The construction of the landscape is sturdy and strong. • The composition is well thought out. • Items created within the landscape are correctly proportioned and appropriate.					
5. Overall Presentation • The art shows a high level of creativity and originality. • The art is very indicative of artistic ability and competence. • The overall quality and standard of work are successful in all areas.					
Total score:					