

# SDG 15 Seeding Sustainability

## MM4 Growing and Foraging



### MM4: Growing and Foraging

### Experimentation and Exploration

### Lesson 2: Have Your Pie and Eat It!

Subjects: CSPE, English, Geography, Horticulture, Science

#### Lesson Title and Summary: Have your pie and eat it!

We are becoming increasingly interested about the food we eat and where it comes from. We now can access more knowledge on our food than ever before, which has begun to impact our consumption decisions. Learners examine their own consumption habits, keep records, compare and contrast and display findings.

**Vocabulary: Agricultural Production, Consumption, Food Chain, Grower, Local, Produce (verb and noun), Seasonal**

#### In this lesson, the learner will:

- gather information relating their individual consumption - particularly relating to fruit and vegetables
- practice record keeping and gather data on their fruit and vegetable consumption for a specified period.
- calculate percentages of food consumed that was sourced locally / not locally
- compare percentages of local vs non local food consumed
- display findings in the form of a pie chart

#### Materials

- Internet access
- Flipped Classroom Worksheet: What I eat and where it comes from
- Worksheet: Have your pie and eat it!
- Calculating devices or methods.
- Board/projector or flip chart



# MM4: Growing and Foraging

## L2: Have Your Pie and Eat It!



### ACTIVITY INSTRUCTIONS

#### Activity 1: Flipped Classroom Task: What I Eat and Where it Comes From

*This task requires learners to record daily consumption for a duration as directed by the teacher. Minimum 1 day. Use FLIPPED CLASSROOM WORKSHEET: WHAT I EAT AND WHERE IT COMES FROM.*

- Gathering data (Flipped Classroom Task)
  - For this task, learners will be required to note ALL THE FRUIT AND VEGETABLES they eat per day for a minimum of one day up to one week - duration at the discretion of the teacher. This includes foods that are part of a product like a yoghurt. Learners are advised to check the labels of items to find out ingredients.

*Note: They may have to do some research to find out if the ingredients they list are produced in their country. Do not trust labelling saying "Local" on packaging as although something was made in the country the ingredients may have been sourced outside of the country.*

#### Activity 2: Introducing Pie Charts (5 mins)

1. Direct learners to WORKSHEET: HAVE YOUR PIE AND EAT IT! to discuss possible commonalities of the two images.

#### Activity 3: Calculating Data (40 mins)

1. Divide learners into pairs to use WORKSHEET: HAVE YOUR PIE AND EAT IT! in which they will position the data they see in the example table into segments of the pie chart.
2. Advise learners that as there are 20 people surveyed there are therefore 20 parts of the pie chart. Guide learners in calculating the percentages, assisting where needed.
3. With guidance from the teacher, learners will survey their peers and create a pie chart.

Note: the pie chart should:

- Show % of people who consumed food produced in their country
- Show % people who consumed food produced elsewhere and imported - EU/Non EU
- Show % of people who consumed food in which the location of production is unknown
- Learners may be given the choice to use a computer to do this or manually on paper.
- Assist learners where needed with calculations and transforming their data into their pie charts

#### Activity 4: Share findings (5 mins)

1. Hold a brief whole class discussion inviting learners to share their findings. Ask:
  - How did the findings compare?
  - What was surprising to you?

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### REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One – their opinion they have about the tasks

Use Post-its or a mentimeter survey - [www.mentimeter.com](http://www.mentimeter.com) - to gather reflections

### EXTENSION / REDUCTION ACTIVITIES:

Reduction (40 min lesson): For a shorter lesson, reduce the time given for calculations and pie chart creation. These could be undertaken at home for the next class

Extension (80 min lesson): For a longer lesson, extend pie chart creation to show data from the flipped lesson findings. Use some of the resources in the media box e.g. incorporate tutorials

### MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Pie Chart Generators

- <https://www.canva.com/graphs/pie-charts/>
- <https://nces.ed.gov/nceskids/graphing/classic/pie.asp>
- <https://www.meta-chart.com/pie>
- <https://www.rapidtables.com/tools/pie-chart.html>

Tutorials: <https://kids.classroomsecrets.co.uk/resource/read-and-interpret-pie-charts-video-tutorial/>  
<https://kids.classroomsecrets.co.uk/resource/pie-charts-with-percentages-video-tutorial/>

### LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

- Visit local supermarkets to complete the Flipped Classroom task.
- Invite a supermarket manager or stockist to discuss how they select produce for their stores.

# MM4 L2 WS: HAVE YOUR PIE AND EAT IT!

15 LIFE ON LAND



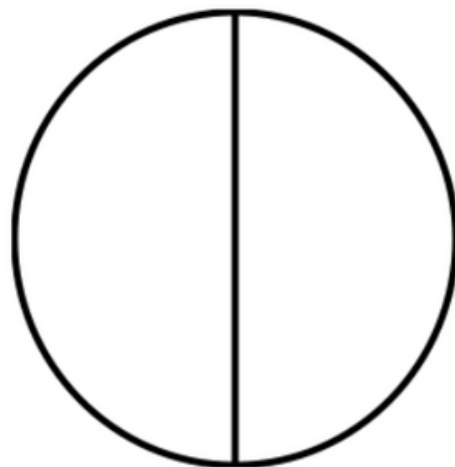
What do the following images have in common?



Imagine you have conducted a survey to find out the most preferred type of pizza.

Example Favourite Pizza for 20 people				
Cheese	Ham and Pineapple	Meat feast	Vegetarian	Vegan  <input type="checkbox"/>
4	5	6	1	4

Looking at the numbers, how could you fit these numbers into a circle (pie)?



Eg:

20 people = 100% 10 people = 50 %

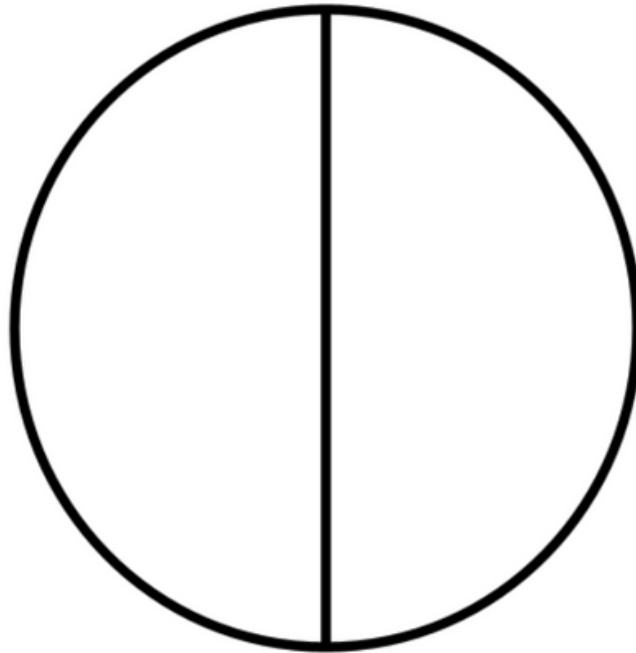
## MM4 L2 WS: HAVE YOUR PIE AND EAT IT!

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### Pair work:

Using the data from the table, complete this pie chart showing how many people prefer which type of pizza:



If 20 people = 100% and 10 people = 50% Calculate What percentage are the following number of people:

1 person =

2 people =

3 people =

4 people =

5 people =

6 people =

7 people =

8 people =

9 people =

11 people =

12 people =

13 people =

14 people =

15 people =

16 people =

17 people =

18 people =

19 people =



## MM4 L2 WS: HAVE YOUR PIE AND EAT IT!

### Survey your peers and find out:

How many people consumed food produced in their country?

How many people consumed food produced elsewhere/imported from abroad?

How many people consumed food but didn't know where it was from?

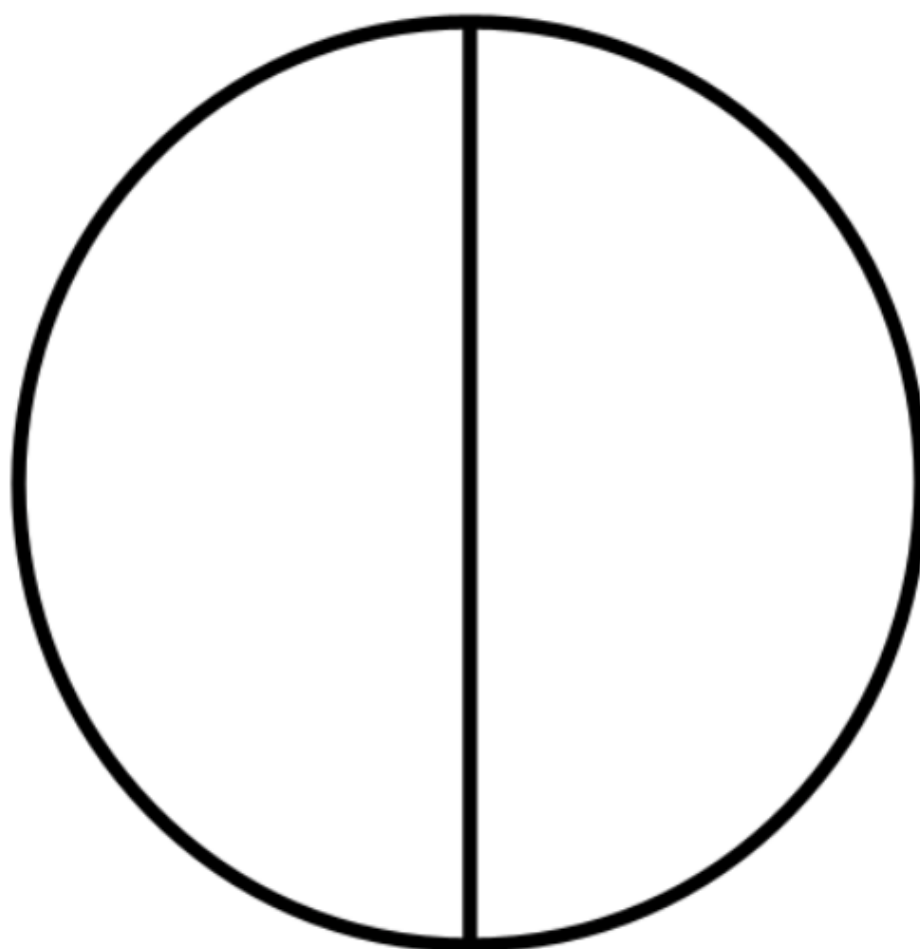
<i>Produced in country</i>	<i>Produced abroad</i>	<i>Unknown</i>



## MM4 L2 WS: HAVE YOUR PIE AND EAT IT!

Now working in pairs, show this data in a pie chart:

- Show % of people who consumed food produced in their country
- Show % people who consumed food produced elsewhere and imported - EU/Non EU
- Show % of people who consumed food in which the location of production is unknown





## MM4 L2 WS: 'WHAT I EAT AND WHERE IT COMES FROM' FLIPPED CLASSROOM TASK

### Gathering Data

For this task you will be required to note all the fruit and vegetables that you eat. This includes foods that are part of a product, like a yoghurt. Check the labels of items to find out ingredients.

You will do this for: \_\_\_\_\_ (insert duration here as directed by your teacher)

*Note: You may have to do some research to find out if the ingredients you list are produced in your country. Do not trust labeling saying "Local" on packaging as although something was made in the country the ingredients may have been sourced outside of the country.*

	FOOD	INGREDIENTS	LOCAL)Grown/produced in...be specific)	NON LOCAL(indicate where its from)	UNKNOWN
EXAMPLE	Homemade Strawberry Jam from ....	Fresh Strawberries Water Sugar Lemon	Kerry:_____ farm	Non EU- ... EU - ....	
Item 1					
2					
3					
4					
5					
6					
7					