

# WELCOME



**TOPIC 1: SOIL**  
**TOPIC 2: COMPOSTING**  
**TOPIC 3: PLANTING**  
**TOPIC 4: WATERING**  
**TOPIC 5: HARVESTING**

## **ECO-EDIBLE URBAN GARDENING**

**Care for People, Care for Planet & Share Surplus**

**Facilitators:**

**Vinodh Sivaraman & Sundus Al-Saquaf**

**Content Developer: Norani Abu Bakar**



# Time breakout

This lesson is around 1.5 hours:

5 minutes – Welcome

5 minutes – Ice-breaker

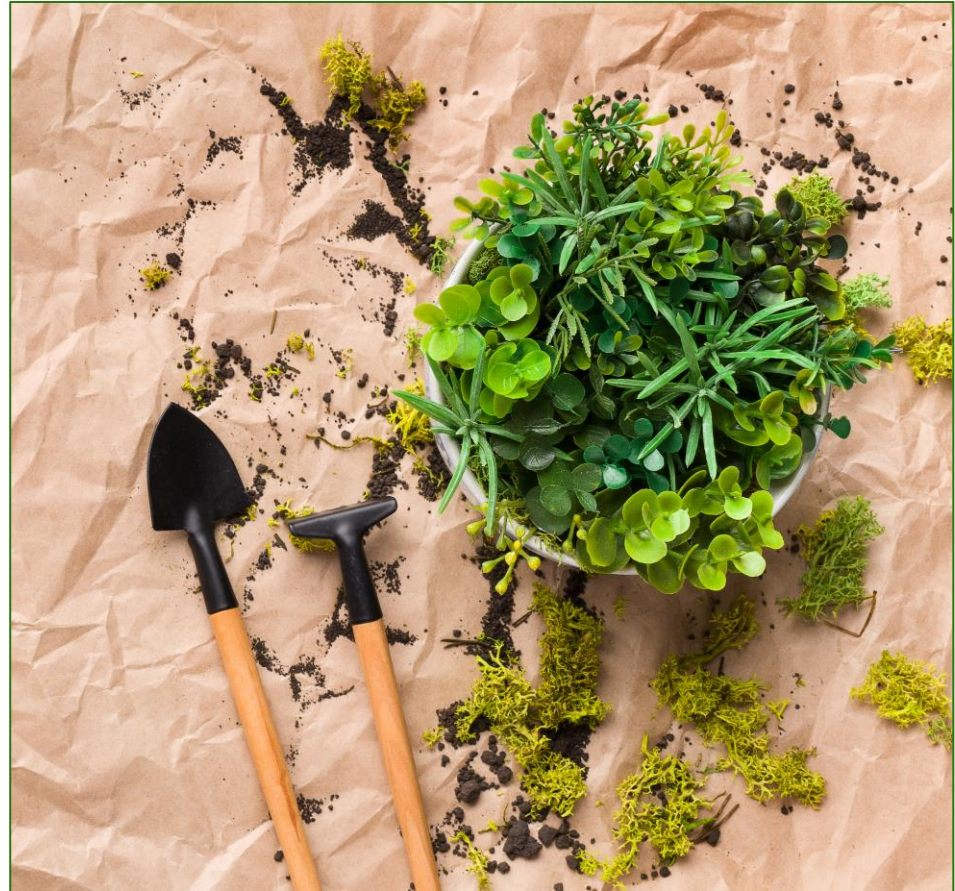
60 minutes – Theory & Activity

10 minutes – Group Breakout

5 minutes – Conclusion

5 minutes - Announcement

Please mute your speaker when  
you are not speaking





# ICE-BREAKER

What sound is this?  
(Please type your answer in chat)

First sound – lamb, chicken, cow

Second sound – whale, monkey, puppy

Third sound – duck, trumpet, chicken

Fourth sound – mouse, bat, cricket

Fifth sound – rooster, duck, goose



**Do you know what is the national  
animal of Malaysia?**

# What is the national animal of Malaysia?

## MALAYAN TIGER FACTS

Scientific name

***Panthera tigris jacksoni***

Status

**Critically endangered**

Population

**250-340**

in 2016



Average length • male **2.59m** female **2.39m**

Habitat

**Tropical moist broadleaf forests**

*Found only in Peninsular Malaysia and the southern tip of Thailand*

Weight

• male **47kg - 129kg**

• female **24kg - 88kg**



The Malaysian Tiger Infographic

Source: WWF, animalspot.net



**National Emblem of Malaysia**





# Map of National Animals in Different Parts of the World



What is the national animal of Malaysia?

# ICE-BREAKER

(Raise hand for the correct answer)



What flower is this?



Canna Lilly

Hibiscus

Frangipani

What vegetable is this?



Amaranth

Moringa

Malabar

Spinach

**TOPIC 1: SOIL**  
**PLANTS AND PEOPLE NEED**  
**NUTRITIONAL FOOD TO LIVE WELL**  
**1A. FOOD AND PEOPLE**  
**1B. FOOD FOR PLANTS**





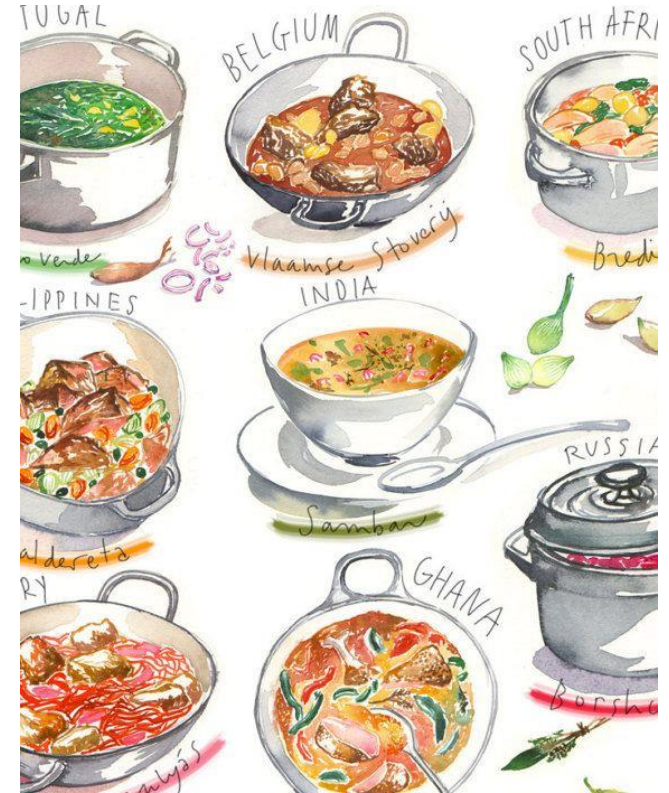
Let's talk about FOOD and PEOPLE

Please tell us your name and your favourite food



Let's talk about FOOD and PEOPLE

Tell us the country of origin for this food



Let's talk about FOOD and PEOPLE

Tell us the country where these dishes are most popular



Choose one

China

Myanmar

Malaysia

Italy

Afghanistan





Let's talk about FOOD and PEOPLE

Tell us the country where these dishes are most popular



Choose one

China

Myanmar

Malaysia

Italy

Afghanistan



Let's talk about FOOD and PEOPLE

Tell us the country where these dishes are most popular



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# Let's talk about FOOD and PEOPLE

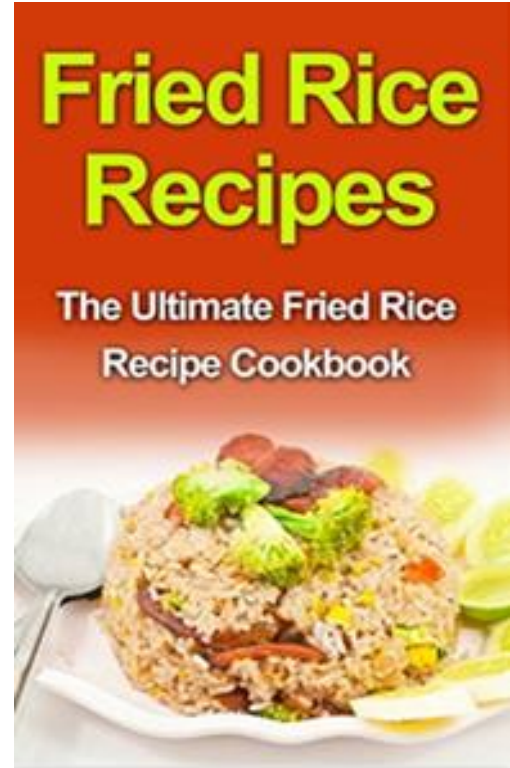
## Homework – Select 2 countries and research on 2 fruit trees that can grow there (to share next week)



Let's talk about FOOD and PEOPLE

Let's discuss on the ingredients and where we can get them from

- 1) Rice
- 2) Oil
- 3) Onion
- 4) Carrot
- 5) Anchovies
- 6) Peas
- 7) Egg





Let's talk about FOOD and HUMAN

## Where do the ingredients come from? RICE?

1) Rice from paddy – what does paddy need to grow well?

People,  
water, soil,  
air and  
sunshine



shutterstock.com • 331630712

# Let's talk about FOOD and PEOPLE

## Where do the ingredients come from? OIL?

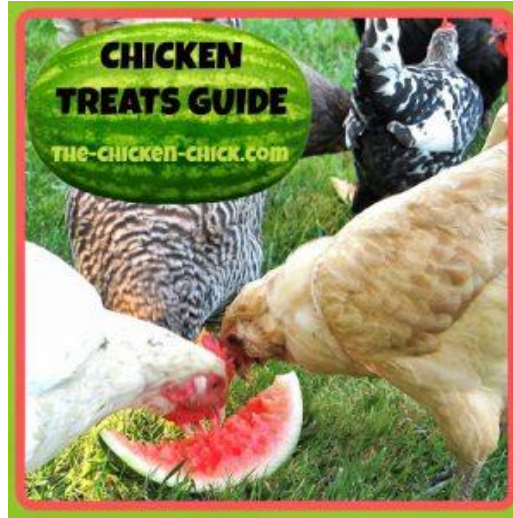
1) Which cooking oil you normally used? What are they made from?





# Let's talk about PLANTS and PEOPLE

Eggs come from chicken. Where do chicken get their food from?



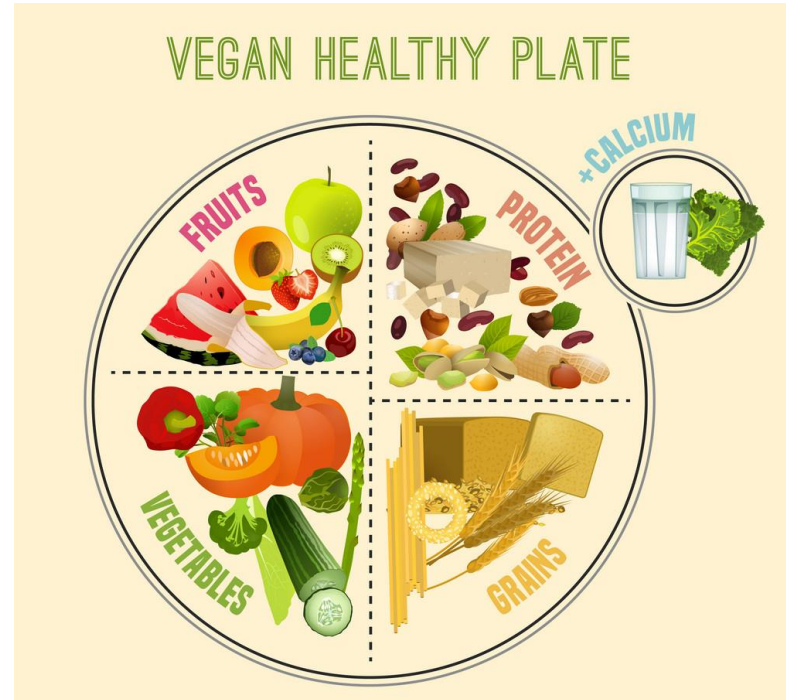
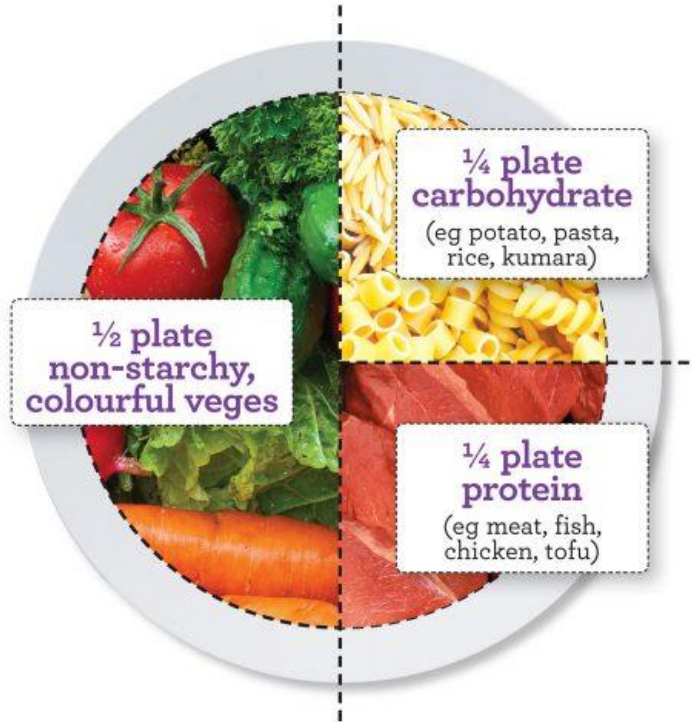


# Let's talk about PLANTS and PEOPLE

For Fried Rice - Where do these vegetables get their food from?



What are in your plate?  
Do you always have a Healthy Plate?  
Nutritious food is one of the basic human needs.





Nutritious food is a must for us to remain healthy



Indian Food



Japanese Food



**LET'S TALK ABOUT WHAT WE NEED  
TO LIVE OTHER THAN FOOD**

# Basic needs for human to live



# WHAT PLANTS NEED TO GROW HEALTHILY?





# WHICH ELEMENTS/ITEMS BELOW ARE NEEDED THE MOST BY PLANTS TO LIVE HEALTHILY? WHY?



Which plant needs more 'food' from the soil?  
Which plants need more water and sunshine?



Papaya



Water Spinach/  
Kang Kong



Chilli



# Let's talk about PLANTS and SOIL

Which soil has the most nutrients to feed the plants?

Which one of these is the best soil for planting?

1) Sand



2) Clay



3) Silt

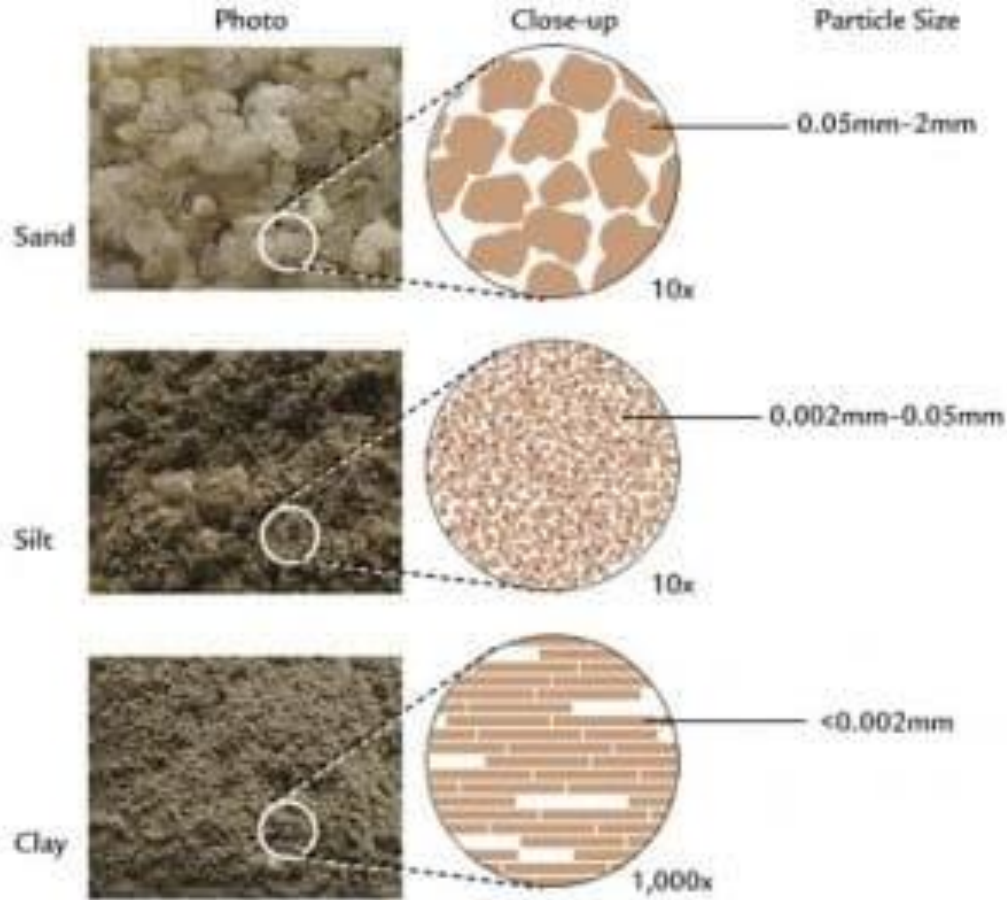


4) Loamy





# Sand, Silt, and Clay



**Sandy loam soil is  
a combination of**

*sand, silt, and clay.*



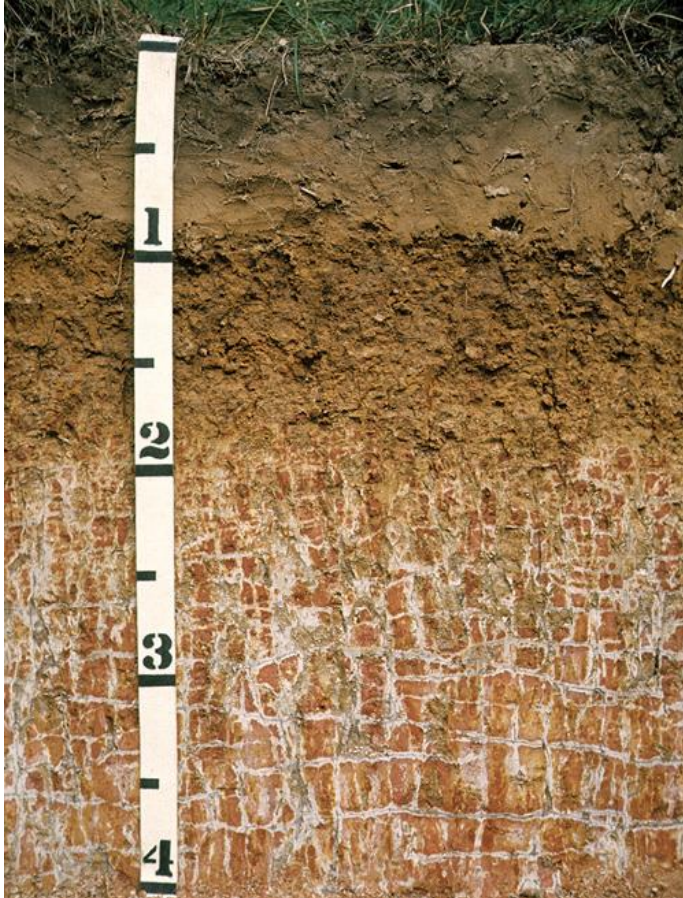
# How long does it take to produce 2-3 cm soil naturally?





WATCH: Introduction to Soil: <https://www.youtube.com/watch?v=ayhA6g3hopo&t=39s>





**Let's discuss what we learned  
from the video.**

**(Group Breakout – 10 min)**

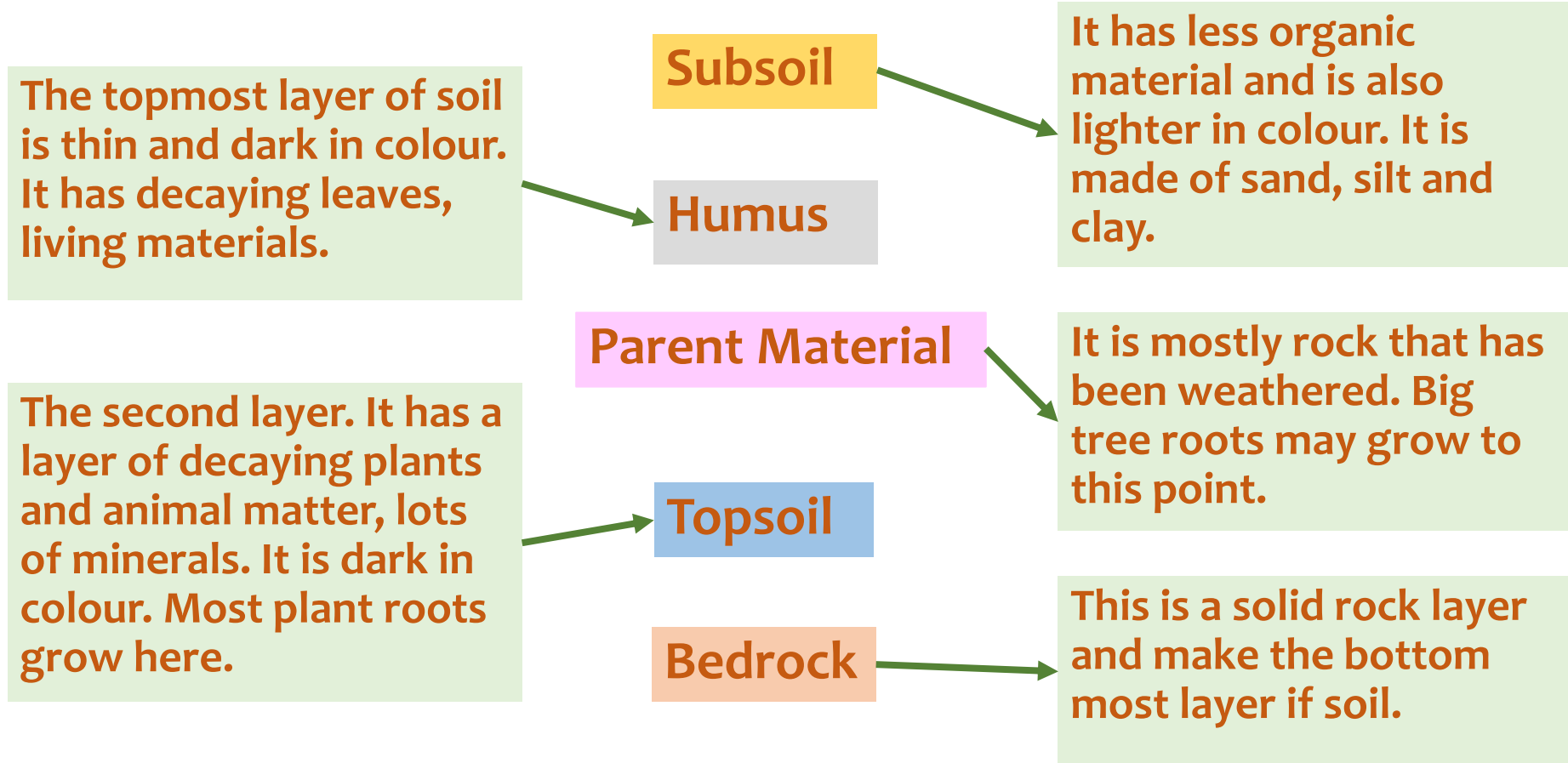
**Soil is made-up of multiple  
layers.**

**Which part of the soil layer do  
plants grow well?**

**More pictures on different layers of soil.**  
**Describe on the look of each layer.**



# Let's learn on soil layer ... Each person reads one description.





# Draw lines to match the layers

Under the ground

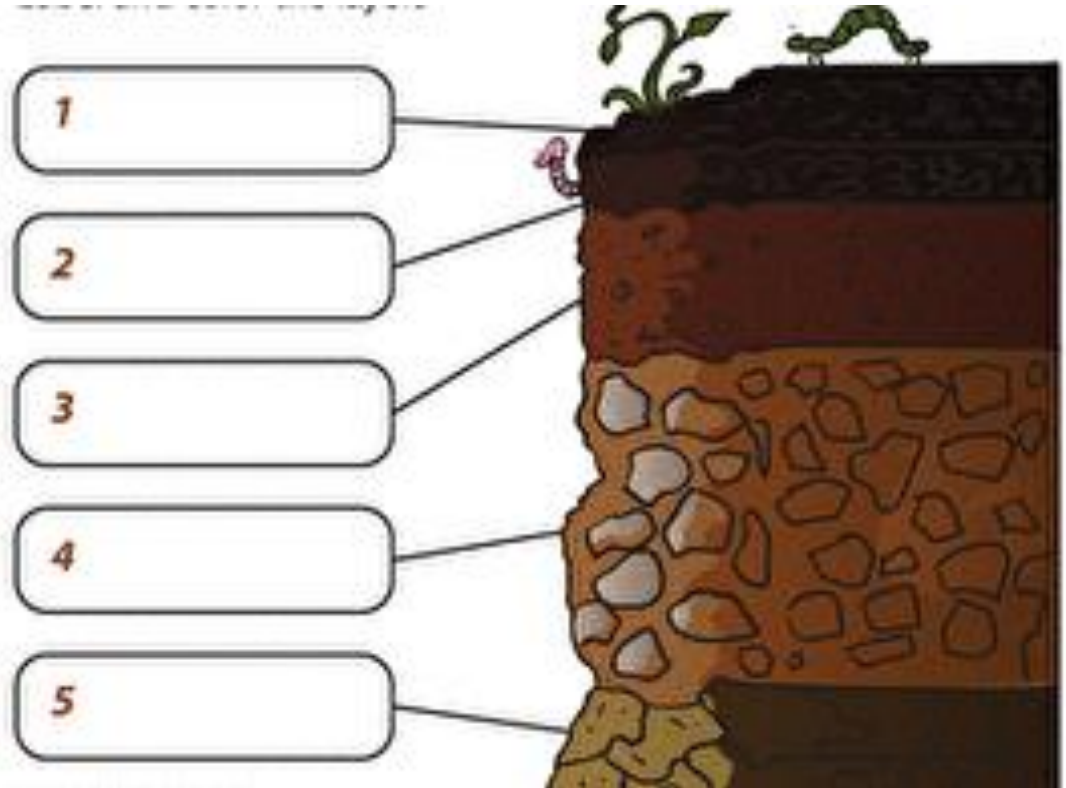
Bedrock

Humus

Parent Material

Subsoil

Topsoil



**Which living creatures make up soil community  
or soil biodiversity?**

**DID YOU KNOW?**



## Soil Community Or Soil Biodiversity

### Above the ground (seen)

- Megafauna (toads, moles, beavers, rabbits, badgers, etc.)

### In the ground - beneath our feet (Seen and unseen)

Seen – earthworm, mites, ants

Unseen – microorganism like bacteria, fungi, protozoa and fungi





Toad



Moles

**Soil Community**  
**These are our potential**  
**gardening team!**

**THE MEGAFAUNA TEAM**  
**Guess their names!**

**Moles, Beaver, Rabbit, Toad, Moles**  
**(Share their names in your language too)**



Badger



Rabbit

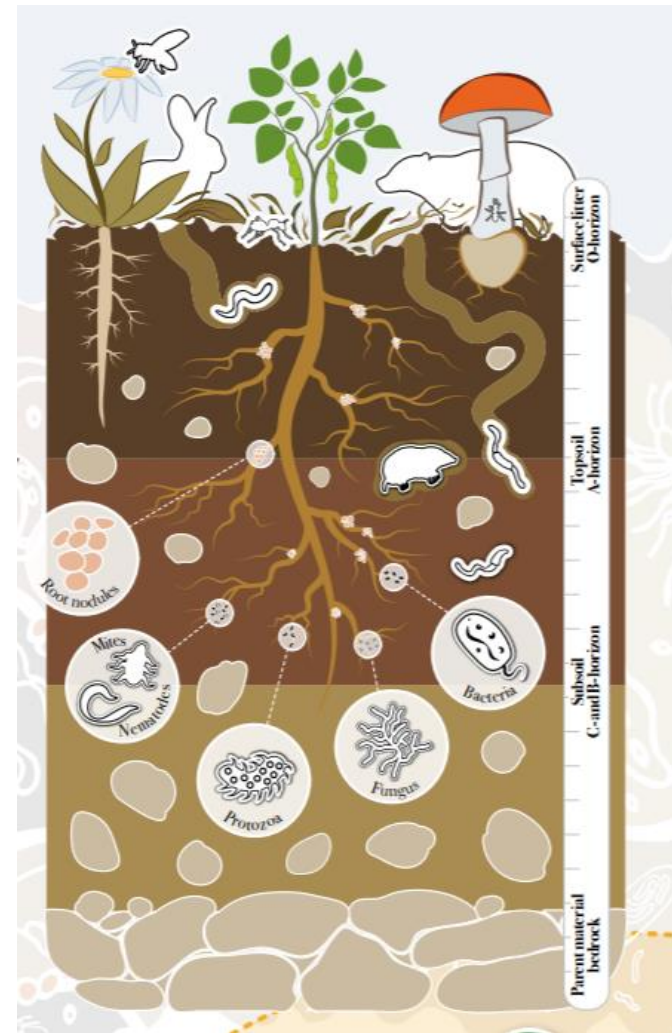


Beaver

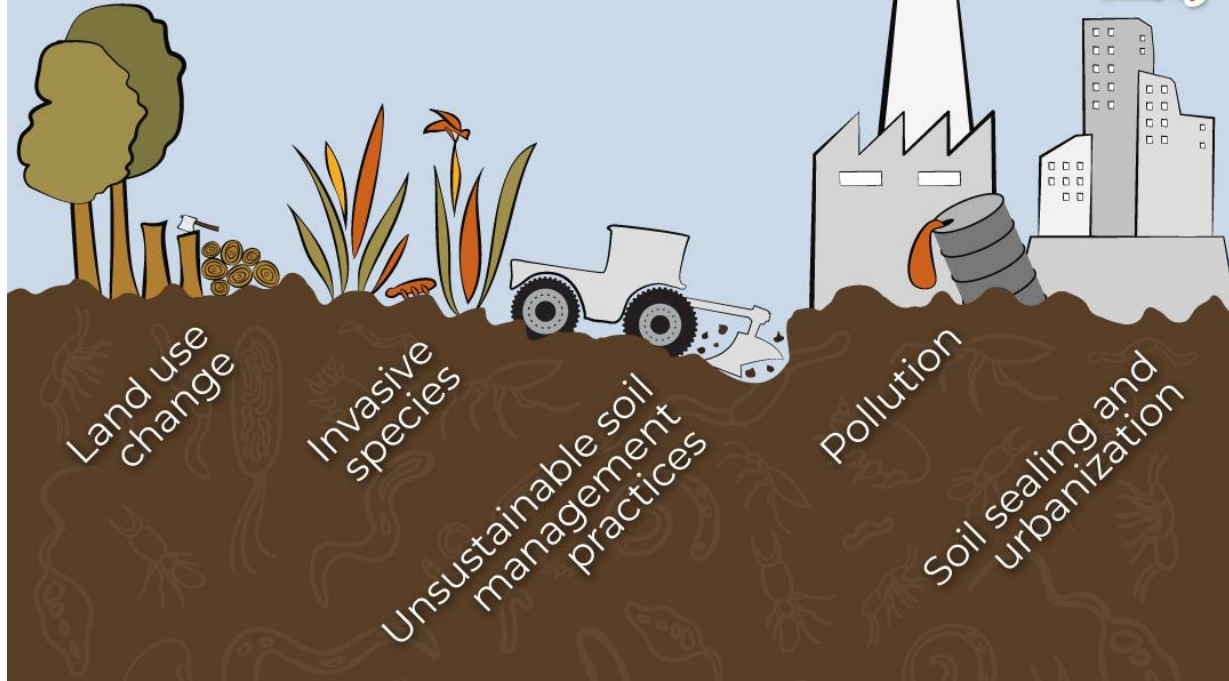
## More information on soil

- Plants nurture the diverse living organisms in the soil, and the organisms keep the soil healthy and fertile.
- Soil is a home to **more than one quarter (25%)** of our planet's biodiversity.
- **Soil organisms work together 365 days 7 days a week and 24 hours a day to sustain life our life and life on Earth.**

Source: <http://www.fao.org/world-soil-day/theme/en/>



# 5 drivers of soil biodiversity loss



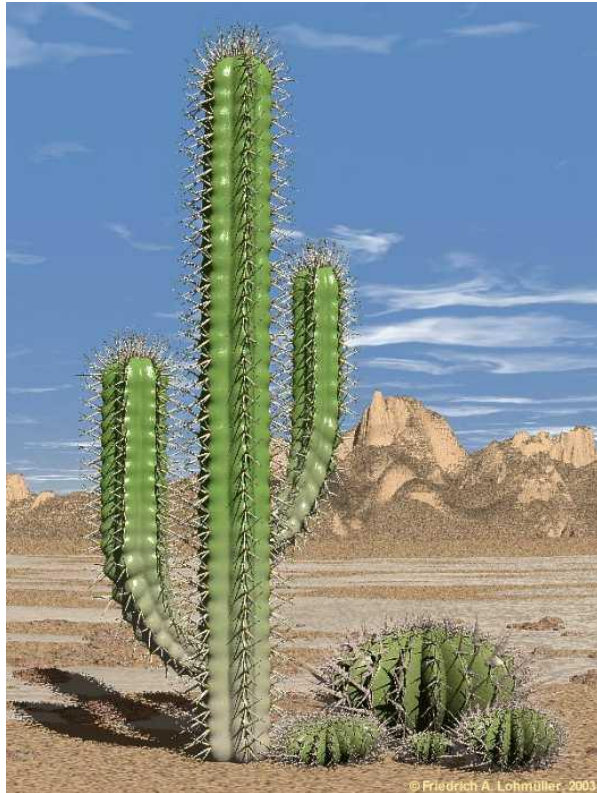
Food and Agriculture  
Organization of the  
United Nations





# Plants living in different types of soil

## The nutrients in the soil feeds the plants







**Healthy soil organism - Healthy soil - Healthy plants - Healthy food.**

**SADLY, WHEN HUMAN AND PLANTS DO NOT GET  
ENOUGH NUTRITION.... THEY BECOME SICK...**







## HOMework 2 – PRACTICAL

Get a transparent drinking glass or a plastic bottle. Do the JAR TEST.

Suggest your soil mixture. Please upload the picture of your soil Jar Test and write about your soil mixture at Teen4CAP Facebook Group.

Have Fun!



GREENLAND (DENMARK)

CANADA

UNITED STATES OF AMERICA

MEXICO

RUSSIA

CHINA

INDIA

NORTH KOREA

SOUTH KOREA

JAPAN

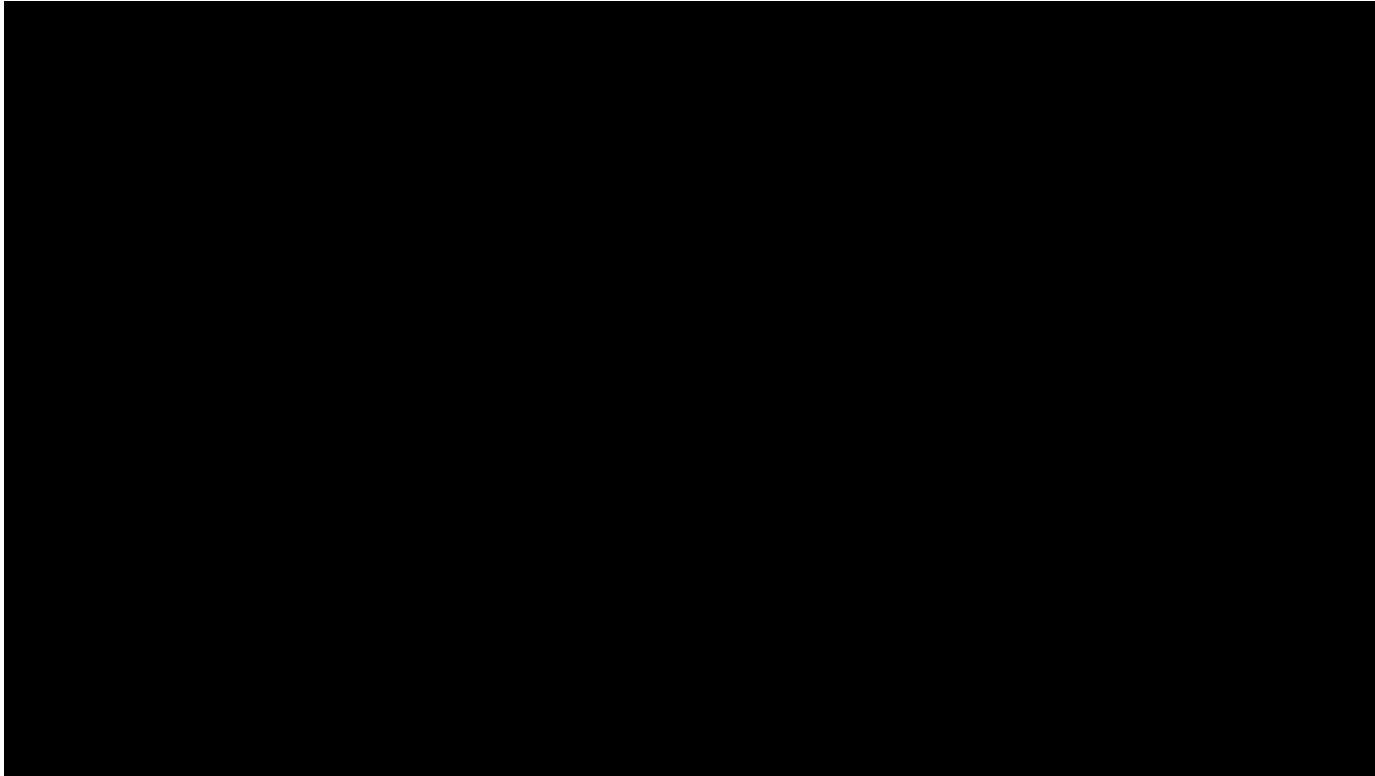
VIETNAM

MALAYSIA

DEMOCRATIC  
REPUBLIC  
OF THE CONGO

**HOMEWORK 3 – Watch this video. The link and the questions for online discussion is given at Teens4CAP Facebook.**

**[www.facebook.com/Teens4CAP](https://www.facebook.com/Teens4CAP)**



Source: [https://www.youtube.com/watch?v=hbdsHOnD\\_gw](https://www.youtube.com/watch?v=hbdsHOnD_gw)



# TEENS4CAP

## SELF PACE REVISION ANY TIME ANY WHERE!

**REVIEW ON EACH  
LESSON**

**KAHOOT QUIZ**

**The link will be given at  
the end of each session.**

**TOPIC 1: SOIL**

**TOPIC 2: COMPOSTING**

**TOPIC 3: PLANTING**

**TOPIC 4: WATER & WATERING**

**TOPIC 5: HARVESTING**

**SOIL:**

<https://create.kahoot.it/share/topic-1-soil-teens4cap/034a6201-f5ca-4342-853b-d32a7b917f8d>

**COMPOSTING:**

<https://create.kahoot.it/share/topic-2-composting-teens4cap/b69b2f06-fef5-4e9c-97d3-368de19f6efb>

**PLANTING:** <https://create.kahoot.it/share/topic-3-planting-propagating-teens4cap/3foedeof-d528-4cae-b183-fbe6f02ac276>

**WATER & WATERING PLANTS:**

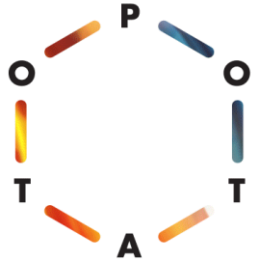
<https://create.kahoot.it/share/topic-4-water-watering-plants-teens4cap/89866ef1-27aa-4f03-9f0b-8301a14ca6e6>

**HARVESTING:**

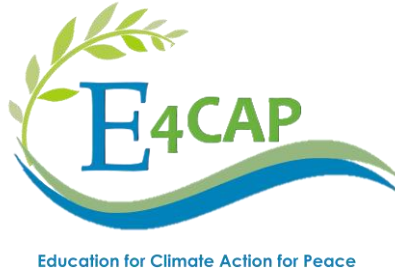
<https://create.kahoot.it/share/topic-5-harvesting-teens4cap/0c3ad5e6-76d9-4738-bbc5-e3173772059f>

# SEE YOU NEXT WEEK!

## Thank you



**POTATO  
PRODUCTIONS**



**SDG Secretariat Office**



Climate Action for Peace (CAP) was conceptualized by The Blue Ribbon (TBR) as part of its aspiration for global peace building. Through this initiative, Teens4CAP program was born. This Eco-Edible Gardening series is facilitated by the teens and young adults that TBR mentors. Most of them are underprivileged youth – refugees, asylum seekers and stateless teens – that do not get access to formal education.