

# What will we cover today?

## + Your paragraphs:

5C) With the aid of examples, assess the extent to which ages influences patterns of migration (15)

## + **How to write a conclusion**

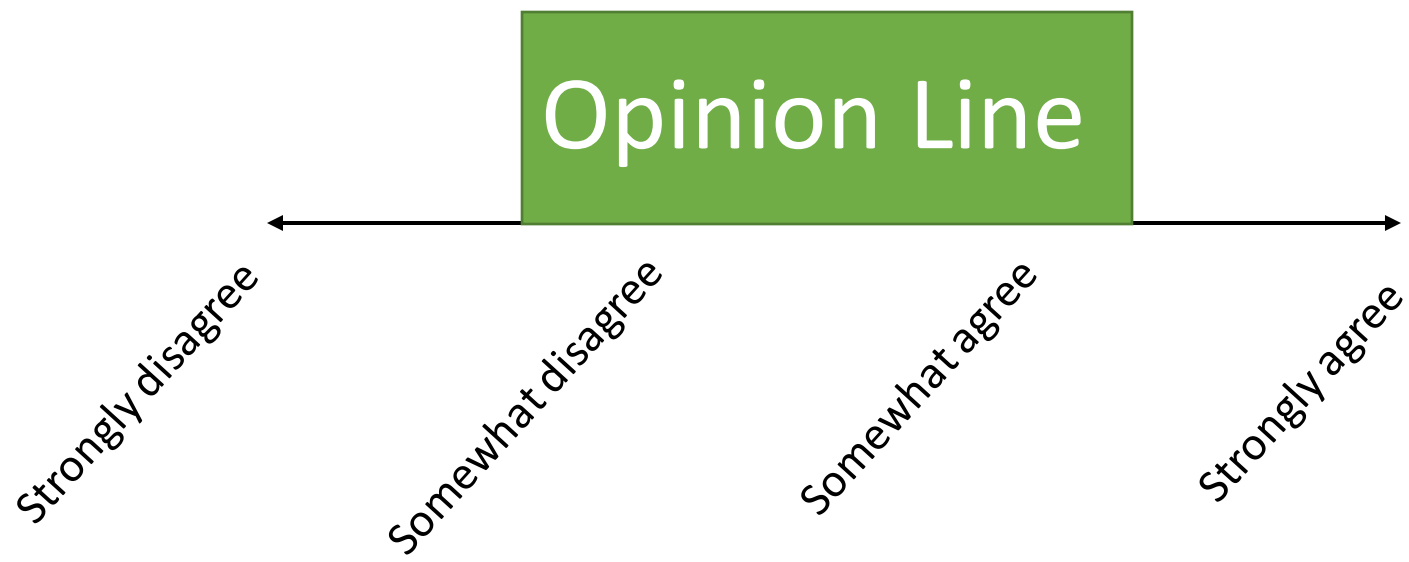
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Weathering	Physical (mechanical) weathering processes: freeze-thaw, heating/cooling, salt crystal growth, pressure release (dilatation), and vegetation root action	Confident
	Chemical weathering processes: hydrolysis, hydration, and carbonation.	Some confidence
	General factors affecting the type and rate of weathering: climate, rock type, rock structure, vegetation, and relief.	Some confidence
	Specific factors affecting the type and rate of weathering: temperature and rainfall (Peltier diagram)	Not confident

Exam practice



'Age is the most significant factor influencing migration patterns'



'More than one  
place  
(contrasting?)

Make a judgement

How strongly

***5C) With the aid of examples, assess the extent to which  
ages influences patterns of migration (15)***

Be specific about  
which patterns are  
affected

<b>Point (What is happening?)</b>	<b>Age is a significant macro-factor in influencing voluntary economic migration</b>
<b>Explanation (Why is that happening?)</b>	<b>Many studies show that the highest probability for migrating is between the ages of 20 and 30 years old. Younger, childless people may migrate for better economic prospects and employment, either internally with rural-urban migration, or internationally through immigration – many countries depend on remittance payments back to older relatives.</b>
<b>Examples (Where is this happening?)</b>	<b>The mean age of Polish migrants to the UK shortly after Poland joined the EU was 30.8 years.</b>
<b>Evaluation (is this always the case? What might change it?)</b>	<b>With the growth in the importance of labour-related migration and international student mobility, migration has become increasingly temporary and circular in nature and therefore, any significant change in pattern might only be temporary itself.</b>

**Exam Gold**

Point (What is happening?)	Gender is a significant factor in determining patterns of voluntary economic migration.
Explanation (Why is that happening?)	<b>Men</b> , traditionally, migrate to find work and send remittances back to their family. <b>Remittances</b> improve standard of living at the origin of migration, <b>it also allows the woman be the head of the house, improving her status in the family.</b>
Examples (Where is this happening?)	Bahrain, <b>evident in the country age/sex diagram, shows a bulge in the males aged 20-50</b> where men have migrated <b>to work</b> in the secondary sector (manufacturing/industry).
Evaluation (is this always the case? What might change it?)	However, this is not always the case, in the Philippine's its common for the woman of the household to migrate in search of financial stability. They voluntarily internationally migrate to the UK to work in the National Health Service (NHS), due to the fact the UK employs more doctors, the majority being female.

# Olis' Paragraphs

Point (What is happening?)	Distance is another factor that influences the patterns of voluntary migration.
Explanation (Why is that happening?)	<b>Truth is,</b> long journeys take more time and cost more money, leaving the poorer migrants no choice but to make short migrations. It also takes longer to return to the origin, subsequently making it harder to keep in touch with family. Together this causes less people to migrate to destinations of further distance, this is known as distance decay.
Examples (Where is this happening?)	An example is the migration stream of <b>UK to Australia</b> , where people make a <b>voluntary economic migration</b> to Australia. Australia has a health care system in high demand, it also offers higher pay.
Evaluation (is this always the case? What might change it?)	Despite that, a country's improved transport infrastructure can reduce the impacts of distance decay, as it allows cheaper, faster, more reliable travel. <b>An example of this is Brazil's advanced transport network allowing easy internal migration from rural to urban settings.</b>

Your turn

Conclusion:

Summary: Which types of migration  
does age affect?

Analysis: Which is the most  
significant?

Synoptic Link: Can you think this to a  
geography theory?



# Chemical Weathering

- The chemical is usually water
- Very intense process as chemical processes enhanced by temperature

Includes:

**Hydration** - Rocks absorbing  and the rock , which stresses the rock and makes it more vulnerable to other weathering processes.

**Hydrolysis** - Mildly  water reacts or combines with minerals in the rock to create clays and dissolvable salts;  the rock down slightly but mostly makes it vulnerable to other types of weathering.

**Carbonation** - Carbonation occurs when   from moisture in the air reacts with carbonate minerals found in rock. This creates   which breaks down rock. Solution occurs because many minerals are soluble and are removed when they come into contact with water

# Mechanical/Physical Weathering

- 1. Frost wedging or freeze-thaw weathering:** Water gets into  in the rock and at , when temperatures fall the water can freeze. When water freezes it expands, by on average 9%, this puts  on the surrounding rock. This cycle will eventually put enough pressure on the rock to causes pieces to fall off.
- 2. Salt crystallisation:** where the  of water from rock surfaces leads to the crystallisation of salts. Crystallisation leads to a dramatic increase in volume which exerts pressure on the surrounding rock, and can eventually fracture the rock.
- 3. Thermal expansion (heating and cooling):** During the day temperatures rise and heat the rock. As the rock heats up it . Then at night, when temperatures fall, the rock also cools and . This cycle leads to  where the top layers of rock peel away.
- 4. Dialation (Pressure release):** pressure release is the process whereby overlying rocks are removed by . This causes underlying rocks to expand and fracture parallel to the surface. The removal of a great weight, such as a glacier, has the same effect.

# Factors affecting type of weathering:

## Properties of the Parent Rock

The mineralogy and structure of a rock affects it's susceptibility to weathering.

1. Different minerals weather at different rates, this can be due to their **solubility** or the rate of weathering.
2. A **rock's structure** also affects its susceptibility to weathering. Massive rocks like granite generally do not contain planes of weakness whereas layered sedimentary rocks have bedding planes that can be easily pulled apart and infiltrated by water. Weathering therefore occurs more slowly in granite than in layered sedimentary rocks.

## Climate

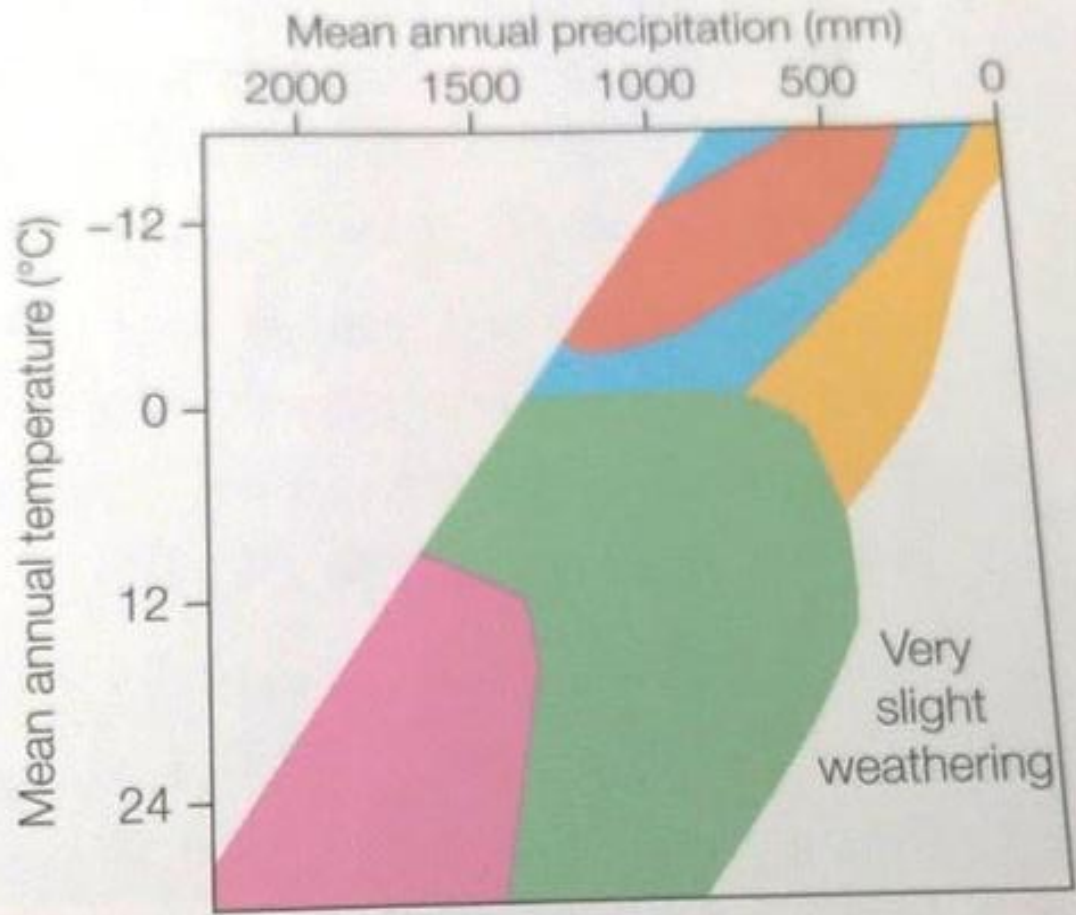
1. Rainfall and temperature can affect the rate in which rocks weather. **High temperatures and greater rainfall increase the rate of chemical weathering.**
2. Rocks in tropical regions exposed to abundant rainfall and hot temperatures weather much faster than similar rocks residing in cold, dry regions.

## Soil

1. Soils affect the rate in which a rock weathers. Soils retain rainwater so that rocks covered by soil are subjected to chemical reactions with water much longer than rocks not covered by soil. Soils are also host to a variety of vegetation, bacteria and organisms that produce an acidic environment which also promotes chemical weathering. **Minerals in a rock buried in soil will therefore break down more rapidly than minerals in a rock that is exposed to air.**

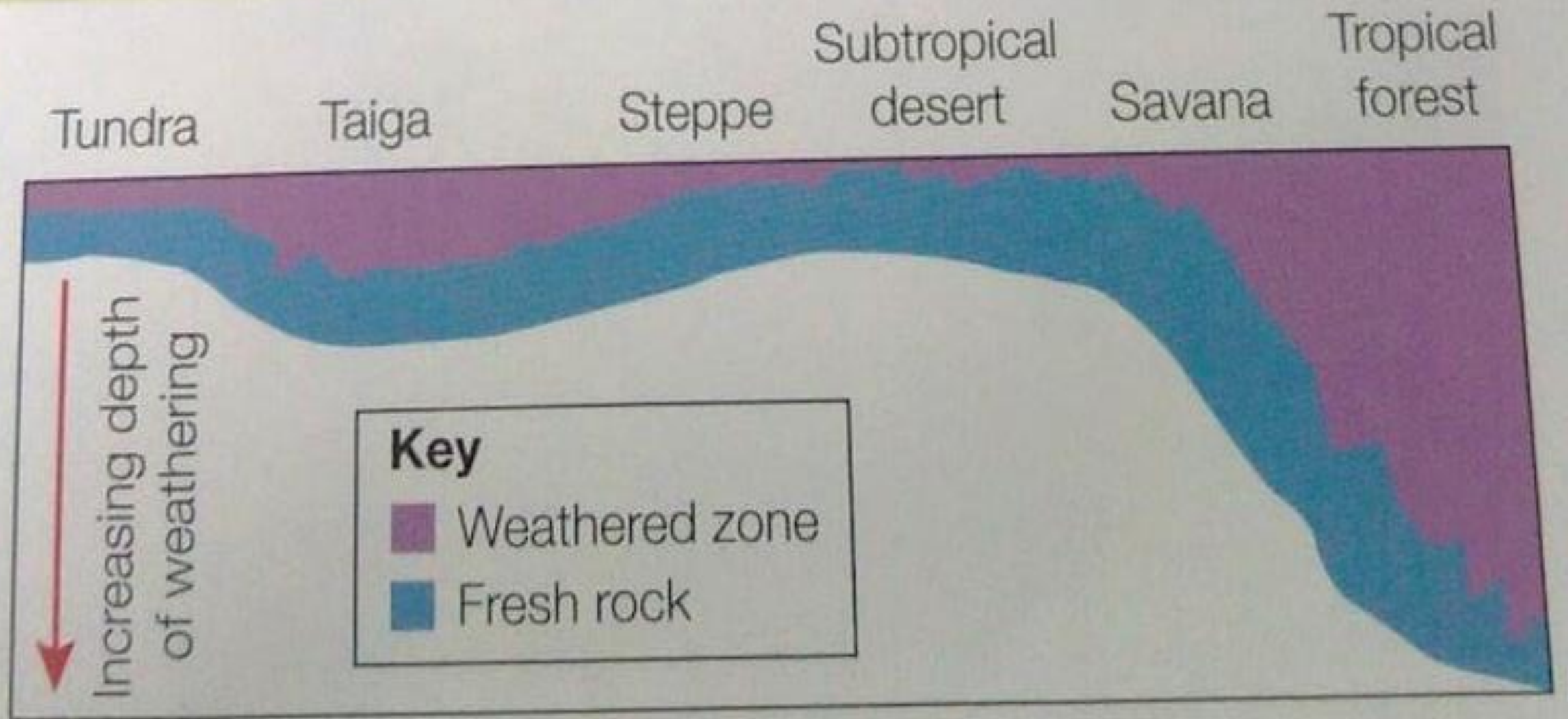
## Length of Exposure

**The longer a rock is exposed to the agents of weathering, the greater the degree of alteration, dissolution and physical breakup.**



Key	
Mechanical weathering	Chemical weathering
Strong	Moderate
Moderate	Strong
Weak	

What could they ask you about this model?



**Figure 4** The Peltier model of weathering

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