THE MOUNTAIN LANDSCAPE

LANDSCAPE

Revision:

Answer these questions in your book.

What is a landscape?

Why is mountain ranges an example of a landscape?

Are mountains landforms too? Give a reason for your answer.

Points to think about as we move through this lesson

Please read and remember!

- Why is there nothing but snow and ice at the top of a mountain?
- Why can a rainforest only survive at the bottom?
- Why does the vegetation get shorter as we go higher up the mountain?
- In which layer would you last see vegetation?
- Where would you see lots of flowers on a mountain?
- What impact does all this have on fauna (animals)?
- Why do we get a lot of our drinking water from mountain ranges?

What makes a mountain ecosystem so different?

Mountains are special Introduction

Please copy into your book

- Mountain areas have a unique ecosystem.
- Different types of vegetation, animal life, soil and landuse occur at different heights on the mountain. These differences reflect the climate variation as it is colder at the top of the mountain than it is toward the bottom.
- The climate on a mountain changes due to altitude (height) and aspect which affects temperature and precipitation.

Altitude

Please copy into your book

- **<u>Altitude is the height a spot is above sea level.</u>**
- Everyone can feel that it gets colder the higher you go up a mountain.
- Temperature falls at a rate of 6°C every 1000 metres (1km) that you travel. Because air contains less oxygen it becomes thinner at high altitudes and this may make it more difficult to breathe.

Aspect

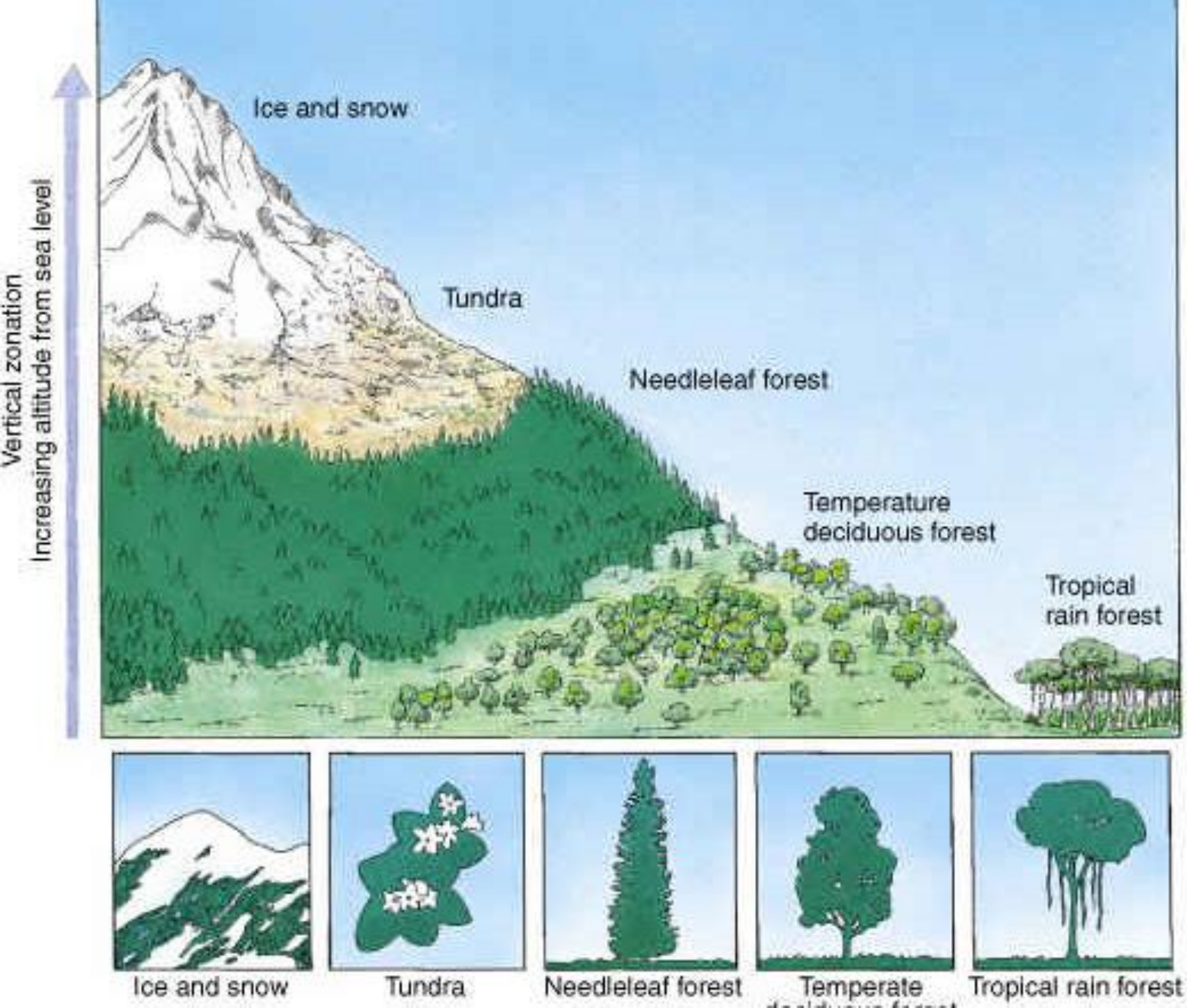
Please copy into your book

- **<u>Aspect is the direction that the slope is facing.</u>**
- Slopes that face the sun receive far more sunlight and therefore more heat and have higher temperatures.
- Those slopes that face away from the sun and cooler and it is harder for vegetation to survive.
- This affects the type of vegetation that can grow.

Precipitation

Please copy into your book

- **<u>Precipitation can fall as rain or snow on mountains.</u>**
- Mountain areas are usually wetter than surrounding lower lands. This is because moisture filled air is forced to rise up and over the mountains and as it does this the moisture condenses and falls as rain or snow. This is known as **orographic rainfall.**
- More rain tends to fall on the side of the mountain where the air was pushed up.



Layers of the Mountain Landscape

Vegetation

Please copy into your book

Some real life snaps

Tundra

Needleleaf forest

Human Environment

Needleleaf forest

Increasing altitude


35


Tundra
Snow and Ice

Questions to discuss

Please answer these in your books using the notes you have taken down in this lesson

- Why is there nothing but snow and ice at the top of a mountain?
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- Why does the vegetation get shorter as we go higher up the mountain?
- In which layer would you last see vegetation?
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