

# Study module Good & bad geology

Nordland nasjonalparksenter  
Handbook for teachers



NORTHERN ENVIRONMENTAL  
EDUCATION DEVELOPMENT



Northern  
Periphery  
Programme

2007–2013

Innovatively investing  
in Europe's Northern  
Periphery for a sustainable  
and prosperous future



European Union  
European Regional Development Fund



NORTHERN ENVIRONMENTAL  
EDUCATION DEVELOPMENT



Northern  
Periphery  
Programme  
2007–2013

Innovatively investing  
in Europe's Northern  
Periphery for a sustainable  
and prosperous future



European Union  
European Regional Development Fund

## Study module – Good & bad geology

Climate quiz



By how many centimeters did the oceans rise during the 1900-century?

Choose one answer.

1 cm

17 cm

50 cm

What does global warming not lead to?

Choose one answer.

The ocean rises

The ice smelts

There will be fewer cars

How much of the human emissions of greenhouse gasses come from cars in Norway?

Choose one answer.

5 %

10 %

30 %



How plausible is it that climatic changes are caused by humans, according to UN's climate panel?  
Choose one answer.

30 %

90 %

100 %

What is the name of the ocean current which causes warmer climate conditions in Norway?  
Choose one answer.

The Canary Stream

The Tennis Stream

The Gulf Stream

What will happen to the island Tuvalu if earth gets warmer?  
Choose one answer.

More people will move there

The island might be flooded

People will get a better tan

What is fossil fuel?

You may choose several answers.

Oil, coal, gas, bio pellets, paper & cardboard,  
geothermal energy

Do nuclear power plants emit CO<sub>2</sub>?

Choose one answer.

No

Yes

Only by accident

Who owns the atmosphere?

Choose one answer.

No one

USA

Europe, Australia and Africa

Who received Nobel's Peace Prize in 2007?

Choose one answer.

Barrack Obama

Al Gore and the UN's climate panel

Doctors Without Borders

Which climatic changes could occur in Norway?

Choose one answer.

Winters will be colder

There will be higher temperatures, more rain and less snow

There will be winter in June and summer in December

Which countries contribute the most to pollution?

Choose one answer.

Poor countries

Rich countries

Countries with the highest populations

What is climatic change?

Choose one answer.

Changes in humidity in the atmosphere

Changes in temperature and precipitation

The rainforest disappearing

Which of these vehicles are the most environmentally friendly?

You may choose several answers.

Mini bus, bus, train, airplane, car, taxi, cruise boat, lorry

Which international agreement regulates CO<sub>2</sub>-emissions?

Choose one answer.

Kyoto Protocol in which industrialized countries agreed on reducing their CO<sub>2</sub> emissions

Genève Convention in which USA and Europe will increase their CO<sub>2</sub> emissions because underdeveloped countries will reduce theirs

Schengen Agreement in which underdeveloped countries will reduce their CO<sub>2</sub> emissions

What is the greenhouse effect?

Choose one answer.

That earth gets warmer

That there will be fewer gases in the atmosphere

That the ozone layer gets thinner

Which gases do we find in the atmosphere (greenhouse gases)?

You may choose several answers.

Water vapor, carbon dioxide, methane, ozone, nitrous oxide ("laughing gas"), CFC-gases, carbon monoxide, nitrogen, sulphur, helium, radon

What is a greenhouse gas?

Choose one answer.

A gas that occurs naturally in the atmosphere, letting in radiation with shorter wavelengths and not letting out long waved radiation from earth.

A gas occurring inside earth, making the core temperature at least 4 degrees Celsius.

A gas occurring only in greenhouses produced by green plants, thus keeping temperature constant in greenhouses.



What is infrared radiation?

Choose one answer.

A part of the sunlight that has wavelengths longer than ordinary light

Extra warm sunlight that lays in the red part of the radiation scale.

A type of lights used in a greenhouse.

What is dry ice?

Choose one answer.

Dry ice is CO<sub>2</sub> in solid state

Dry ice is ordinary ice (H<sub>2</sub>O) with temperature under 50 degrees Celsius

Dry ice is frozen nitrogen-gas

How can we drive our cars in a way that reduces CO<sub>2</sub> emissions?

You may choose several answers.

By filling the correct amount of air in the tires

By driving slower

By driving faster

By accelerating more slowly

By accelerating faster

What is solar cell panels made of?  
You may choose several answers.

Silicon (not the same as silicone)

CO<sub>2</sub>

Carbon

Selenium

Micas

Which energy sources are renewable?  
You may choose several answers.

Bio fuel, bio energy, wave power, geo thermal energy,  
solar energy, tidal power, hydro electricity, wind electricity,  
nuclear power, coal based energy, oil, petrol, gas

What is acid rain?  
Choose one answer.

Precipitation with pH under 5,6

Precipitation with pH 7,0

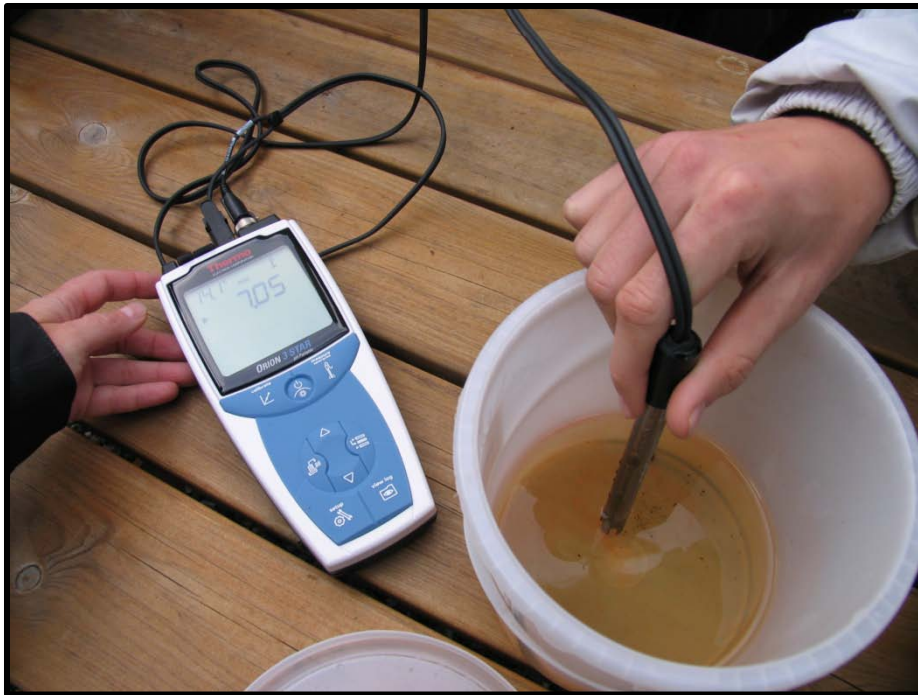
Precipitation with pH over 12

How is acid rain formed?  
Choose one answer.

Air pollution which falls down to earth with precipitation

When very alkaline precipitation mixes with fresh water

As a consequence of inadequate ozone in the atmosphere



How can we neutralize acid rain?  
You may choose several answers.

Using chalk

By fertilizing

By digging ditches

By using phosphate free detergents

Which of the following installations/things/products are produced on the basis of geological resources?  
You may choose several answers.

Icecream

Computer

Rubber tire

Cosmetics

Latex gloves

Paper

Glas

Fuel

Leca pellets

Solar cell panel

Paint

Firs

Asfalt

Organic soil

Natural fertilizer

Rail road tracks

Ceramic tiles

Light bolb

Pencil

Concrete

Plaster

Brick

Bath tub

Air plane fuselage

