

This booklet has questions about you, and about your experiences and interests related to science in school and outside school.

There are no correct or incorrect answers, only answers that are right for you. Please think carefully and give answers that reflect your own thinking.

This questionnaire is being given to students in many different countries. That is why some questions may seem strange to you. If there is a question you do not understand, just leave it blank. If you are in doubt, you may ask the teacher, since this is not a test!

For most questions, you simply put a tick in the appropriate box.

The purpose of this questionnaire is to find out what students in different parts of the world think about science at school as well as in their everyday life. This information may help us to make schools better.

Your answers are anonymous, so please, do not write your name on this questionnaire.

THANK YOU! Your answers will be a big help.

### **START HERE:**

I live in			_ (write the name of your country)
I am	years	old	
I am a	☐ girl	□ boy	

## A. What I want to learn about

How interested are you in learning about the following?
(Give your answer with a tick on each line. If you do not understand, leave the line blank.)

		Not interes- ted		Very interes- ted
1.	Stars, planets and the universe			
2.	Chemicals, their properties and how they react			
3.	The inside of the earth			
4.	How mountains, rivers and oceans develop and change			
5.	Clouds, rain and the weather			
6.	The origin and evolution of life on earth			
7.	How the human body is built and functions			
8.	Heredity, and how genes influence how we develop			
9.	Sex and reproduction			
10.	Birth control and contraception			
11.	How babies grow and mature			
12.	Cloning of animals			
13.	Animals in other parts of the world			
14.	Dinosaurs, how they lived and why they died out			
15.	How plants grow and reproduce			
16.	How people, animals, plants and the environment			
	depend on each other			
17.	Atoms and molecules			
18.	How radioactivity affects the human body			
19.	Light around us that we cannot see (infrared, ultraviolet)			
20.	How animals use colours to hide, attract or scare			
21.	How different musical instruments produce different sounds			
22.	Black holes, supernovas and other spectacular			
	objects in outer space			
23.	How meteors, comets or asteroids may cause disasters			
	on earth			

		Not interes- ted		Very interes ted
24.	Earthquakes and volcanoes			
25.	Tornados, hurricanes and cyclones			
26.	Epidemics and diseases causing large losses of life			
27.	Brutal, dangerous and threatening animals			
28.	Poisonous plants in my area			
29.	Deadly poisons and what they do to the human body			
30.	How the atom bomb functions			
31.	Explosive chemicals			
32.	Biological and chemical weapons and what they			
	do to the human body			
33.	The effect of strong electric shocks and lightning on			
	the human body			
34.	How it feels to be weightless in space			
35.	How to find my way and navigate by the stars			
36.	How the eye can see light and colours			
37.	What to eat to keep healthy and fit			
38.	Eating disorders like anorexia or bulimia			
39.	The ability of lotions and creams to keep the skin young			
40.	How to exercise to keep the body fit and strong			
41.	Plastic surgery and cosmetic surgery			
42.	How radiation from solariums and the sun might			
	affect the skin			
43.	How the ear can hear different sounds			
44.	Rockets, satellites and space travel			
45.	The use of satellites for communication and other purposes			
46.	How X-rays, ultrasound, etc. are used in medicine			
47.	How petrol and diesel engines work			
48.	How a nuclear power plant functions		П	П

B. My future job
How important are the following issues for your potential future occupation or job?
(Give your answer with a tick on each line. If you do not understand, leave the line blank.)

		Not impor- tant		very impor- tant
1.	Working with people rather than things			
2.	Helping other people			
3.	Working with animals			
4.	Working in the area of environmental protection			
5.	Working with something easy and simple			
6.	Building or repairing objects using my hands			
7.	Working with machines or tools			
8.	Working artistically and creatively in art			
9.	Using my talents and abilities			
10.	Making, designing or inventing something			
11.	Coming up with new ideas			
12.	Having lots of time for my friends			
13.	Making my own decisions			
14.	Working independently of other people			
15.	Working with something I find important and meaningful			
16.	Working with something that fits my attitudes and values			
17.	Having lots of time for my family			
18.	Working with something that involves a lot of travelling			
19.	Working at a place where something new and exciting			
	happens frequently			
20.	Earning lots of money			
21.	Controlling other people			
22.	Becoming famous			
23.	Having lots of time for my interests, hobbies and activities			
24.	Becoming 'the boss' at my job			
25.	Developing or improving my knowledge and abilities			
26.	Working as part of a team with many people around me			

C. What I want to learn about
How interested are you in learning about the following?
(Give your answer with a tick on each line. If you do not understand, leave the line blank.)

		Not interes- ted		Very interes- ted
1.	How crude oil is converted to other materials, like			
	plastics and textiles			
2.	Optical instruments and how they work			
	(telescope, camera, microscope, etc.)			
3.	The use of lasers for technical purposes			
	(CD-players, bar-code readers, etc.)			
4.	How cassette tapes, CDs and DVDs store and play			
	sound and music			
5.	How things like radios and televisions work			
6.	How mobile phones can send and receive messages			
7.	How computers work			
8.	The possibility of life outside earth			
9.	Astrology and horoscopes, and whether the planets			
	can influence human beings			
10.	Unsolved mysteries in outer space			
11.	Life and death and the human soul			
12.	Alternative therapies (acupuncture, homeopathy, yoga,			
	healing, etc.) and how effective they are			
13.	Why we dream while we are sleeping, and what			
	the dreams may mean			
14.	Ghosts and witches, and whether they may exist			
15.	Thought transference, mind-reading, sixth sense, intuition, etc			
16.	Why the stars twinkle and the sky is blue			
17.	Why we can see the rainbow			
18.	Properties of gems and crystals and how these are			
	used for beauty			

D. Me and the environmental challenges

To what extent do you agree with the following statements about problems with the environment (pollution of air and water, overuse of resources, global changes of the climate etc.)? (Give your answer with a tick on each line. If you do not understand, leave the line blank.)

	L	ונאsagre	9	Agree
1.	Threats to the environment are not my business			
2.	Environmental problems make the future of the world look			
	bleak and hopeless			
3.	Environmental problems are exaggerated			
4.	Science and technology can solve all environmental problems			
5.	I am willing to have environmental problems solved even if			
	this means sacrificing many goods			
6.	I can personally influence what happens with the environment			
7.	We can still find solutions to our environmental problems			
8.	People worry too much about environmental problems			
9.	Environmental problems can be solved without			
	big changes in our way of living			
10.	People should care more about protection of the environment			
11.	It is the responsibility of the rich countries to solve			
	the environmental problems of the world			
12.	I think each of us can make a significant contribution to			
	environmental protection			
13.	Environmental problems should be left to the experts			
14.	I am optimistic about the future			
15.	Animals should have the same right to life as people			
16.	It is right to use animals in medical experiments if this			
	can save human lives			
17.	Nearly all human activity is damaging for the environment			
18.	The natural world is sacred and should be left in peace			

E. What I want to learn about
How interested are you in learning about the following?
(Give your answer with a tick on each line. If you do not understand, leave the line blank.)

		Not interes- ted		Very interes- ted
1.	Symmetries and patterns in leaves and flowers			
2.	How the sunset colours the sky			
3.	The ozone layer and how it may be affected by humans			
4.	The greenhouse effect and how it may be changed by humans			
5.	What can be done to ensure clean air and safe drinking water			
6.	How technology helps us to handle waste,			
	garbage and sewage			
7.	How to control epidemics and diseases			
8.	Cancer, what we know and how we can treat it			
9.	Sexually transmitted diseases and how to be			
	protected against them			
10.	How to perform first-aid and use basic medical equipment			
11.	What we know about HIV/AIDS and how to control it			
12.	How alcohol and tobacco might affect the body			
13.	How different narcotics might affect the body			
14.	The possible radiation dangers of mobile phones and computers			
15.	How loud sound and noise may damage my hearing			
16.	How to protect endangered species of animals			
17.	How to improve the harvest in gardens and farms			
18.	Medicinal use of plants			
19.	Organic and ecological farming without use of pesticides and			
	artificial fertilizers			
20.	How energy can be saved or used in a more effective way			
21.	New sources of energy from the sun, wind, tides, waves, etc			
22.	How different sorts of food are produced, conserved and stored			
23.	How my body grows and matures			

		Not interes- ted		Very interes- ted
24.	Animals in my area			
25.	Plants in my area			
26.	Detergents, soaps and how they work			
27.	Electricity, how it is produced and used in the home			
28.	How to use and repair everyday electrical and			
	mechanical equipment			
29.	The first landing on the moon and the history of			
	space exploration			
30.	How electricity has affected the development of our society			
31.	Biological and human aspects of abortion			
32.	How gene technology can prevent diseases			
33.	Benefits and possible hazards of modern methods of farming			
34.	Why religion and science sometimes are in conflict			
35.	Risks and benefits of food additives			
36.	Why scientists sometimes disagree			
37.	Famous scientists and their lives			
38.	Big blunders and mistakes in research and inventions			
39.	How scientific ideas sometimes challenge religion,			
	authority and tradition			
40.	Inventions and discoveries that have changed the world			
41.	Very recent inventions and discoveries in science and technology	<i>'</i> □		
42.	Phenomena that scientists still cannot explain			

# F. My science classes To what extent do you agree with the following statements about the science that you may have had at school?

(Give your answer with a tick on each line. If you do not understand, leave the line blank.)

	L	Disagree			Agree	
1.	School science is a difficult subject					
2.	School science is interesting					
3.	School science is rather easy for me to learn					
4.	School science has opened my eyes to					
	new and exciting jobs					
5.	I like school science better than most other subjects					
6.	I think everybody should learn science at school					
7.	The things that I learn in science at school will be helpful					
	in my everyday life					
8.	I think that the science I learn at school will					
	improve my career chances					
9.	School science has made me more critical and sceptical					
10.	School science has increased my curiosity about things					
	we cannot yet explain					
11.	School science has increased my appreciation of nature					
12.	School science has shown me the importance of					
	science for our way of living					
13.	School science has taught me how to take better care					
	of my health					
14.	I would like to become a scientist					
15.	I would like to have as much science as possible at school					
16.	I would like to get a job in technology					

G. My opinions about science and technology
To what extent do you agree with the following statements?
(Give your answer with a tick on each row. If you do not understand, leave the line blank.)

	L	Disagree	9	Agree
1.	Science and technology are important for society			
2.	Science and technology will find cures to diseases such			
	as HIV/AIDS, cancer, etc.			
3.	Thanks to science and technology, there will be greater			
	opportunities for future generations			
4.	Science and technology make our lives healthier, easier and			
	more comfortable			
5.	New technologies will make work more interesting			
6.	The benefits of science are greater than the harmful			
	effects it could have			
7.	Science and technology will help to eradicate poverty and			
	famine in the world			
8.	Science and technology can solve nearly all problems			
9.	Science and technology are helping the poor			
10.	Science and technology are the cause of the			
	environmental problems			
11.	A country needs science and technology to become developed			
12.	Science and technology benefit mainly			
	the developed countries			
13.	Scientists follow the scientific method that always leads them to			
	correct answers			
14.	We should always trust what scientists have to say			
15.	Scientists are neutral and objective			
16.	Scientific theories develop and change all the time			

H. My out-of-school experiences
How often have you done this outside school?
(Give your answer with a tick on each line. If you do not understand, leave the line blank.)
I have ...

		Never		Often
1.	tried to find the star constellations in the sky			
2.	read my horoscope (telling future from the stars)			
3.	read a map to find my way			
4.	used a compass to find direction			
5.	collected different stones or shells			
6.	watched (not on TV) an animal being born			
7.	cared for animals on a farm			
8.	visited a zoo			
9.	visited a science centre or science museum			
10.	milked animals like cows, sheep or goats			
11.	made dairy products like yoghurt, butter, cheese or ghee			
12.	read about nature or science in books or magazines			
13.	watched nature programmes on TV or in a cinema			
14.	collected edible berries, fruits, mushrooms or plants			
15.	participated in hunting			
16.	participated in fishing			
17.	planted seeds and watched them grow			
18.	made compost of grass, leaves or garbage			
19.	made an instrument (like a flute or drum) from natural materials			
20.	knitted, weaved, etc			
21.	put up a tent or shelter			
22.	made a fire from charcoal or wood			
23.	prepared food over a campfire, open fire or stove burner			
24.	sorted garbage for recycling or for appropriate disposal			
25.	cleaned and bandaged a wound			
26.	seen an X-ray of a part of my body			

		Never		Often
27.	taken medicines to prevent or cure illness or infection			
28.	taken herbal medicines or had alternative treatments			
	(acupuncture, homeopathy, yoga, healing, etc.)			
29.	been to a hospital as a patient			
30.	used binoculars			
31.	used a camera			
32.	made a bow and arrow, slingshot, catapult or boomerang			
33.	used an air gun or rifle			
34.	used a water pump or siphon			
35.	made a model such as toy plane or boat etc			
36.	used a science kit (like for chemistry, optics or electricity)			
37.	used a windmill, watermill, waterwheel, etc			
38.	recorded on video, DVD or tape recorder			
39.	changed or fixed electric bulbs or fuses			
40.	connected an electric lead to a plug etc.			
41.	used a stopwatch			
42.	measured the temperature with a thermometer			
43.	used a measuring ruler, tape or stick			
44.	used a mobile phone			
45.	sent or received an SMS (text message on mobile phone)			
46.	searched the internet for information			
47.	played computer games			
48.	used a dictionary, encyclopaedia, etc. on a computer			
49.	downloaded music from the internet			
50.	sent or received e-mail			
51.	used a word processor on the computer			
52.	opened a device (radio, watch, computer, telephone, etc.) to			
	find out how it works			

		Never			Often
53.	baked bread, pastry, cake, etc				
54.	cooked a meal				
55.	walked while balancing an object on my head				
56.	used a wheelbarrow				
57.	used a crowbar (jemmy)				
58.	used a rope and pulley for lifting heavy things				
59.	mended a bicycle tube				
60.	used tools like a saw, screwdriver or hammer				
61.	charged a car battery				
<ul> <li>I. Myself as a scientist</li> <li>Assume that you are grown up and work as a scientist. You are free to do research that you find important and interesting. Write some sentences about what you would like to do as a researcher and why.</li> <li>I would like to</li></ul>					
Because					
J. How many books are there in your home?  There are usually about 40 books per metre of shelving. Do not include magazines.  (Please tick only one box.)					
	None				
	1-10 books				
	11-50 books				
	51-100 books				
	101-250 books				
	251-500 books				
	More than 500 books □				