

CANDIDATE
NAME

CENTRE
NUMBER

--	--	--	--	--

CANDIDATE
NUMBER

--	--	--	--

0893/01

May 2026

No additional materials are needed.

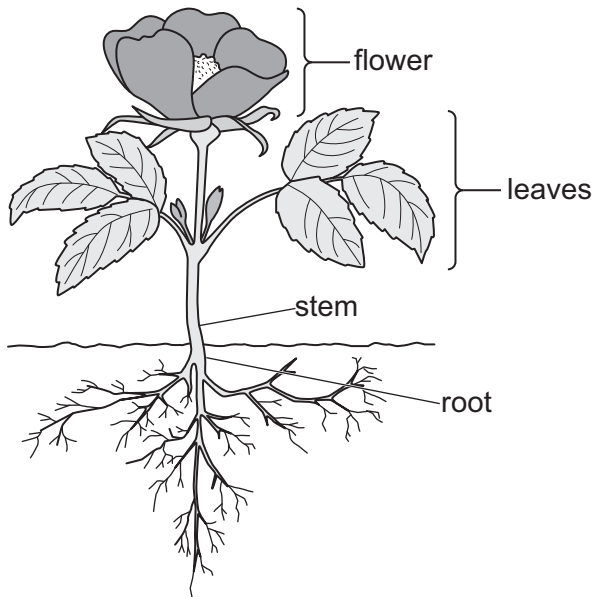
- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen. Do **not** use correction fluid or tape.
- Do **not** write on any bar codes.
- You should show all your working in the booklet.
- You may use a calculator.

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

IB26 05_0893_01/8RP
© Cambridge University Press & Assessment 2026

[Turn over

1 Look at the diagram of a flowering plant.



(a) Water travels through the xylem in the stem to the leaves.

Name the process of losing water from the surface of the leaves.

..... [1]

(b) Describe how water enters the plant.

.....

 [3]

(c) Water travels in the xylem.

Name **one other** substance that travels in the xylem.

..... [1]

2 Use the Periodic Table on page 20 to answer these questions.

(a) Write down the electronic structure of aluminium, Al.

..... [1]

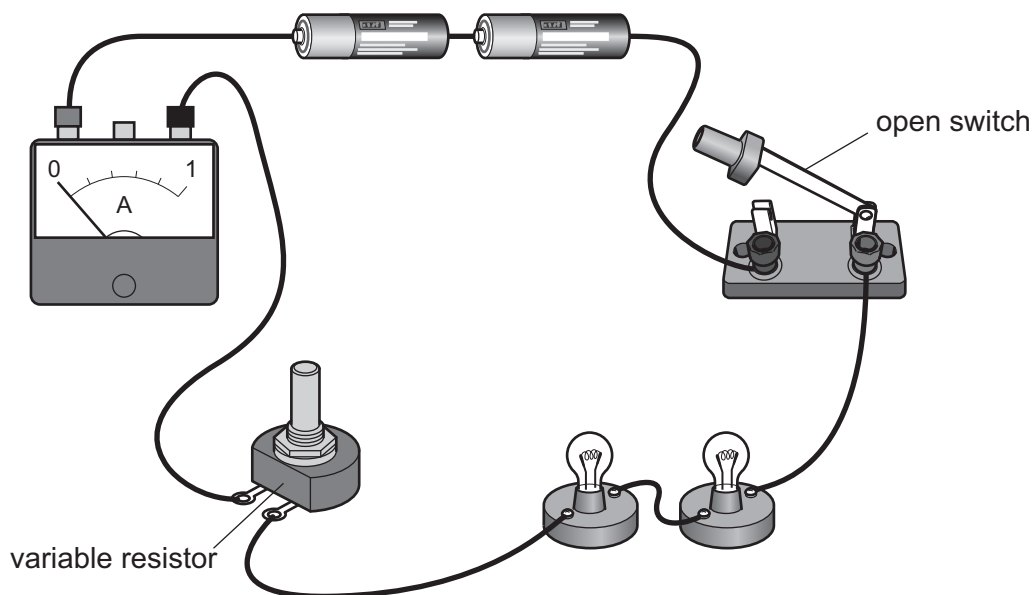
(b) Write down the chemical symbol of an element in the same **group** as aluminium.

..... [1]

(c) Write down the number of electrons in the outer orbit (shell) of a strontium, Sr, atom.

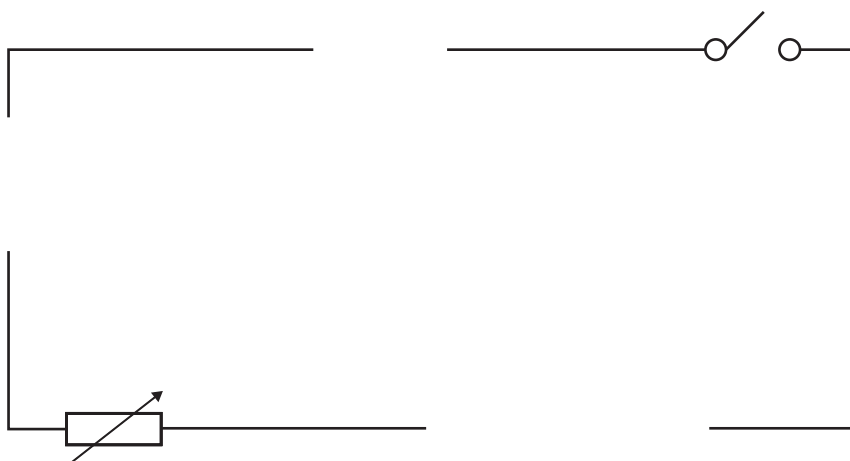
..... [1]

3 Oliver makes an electrical circuit.



(a) Complete the circuit diagram using conventional symbols.

The conventional symbols for the open switch and variable resistor have been drawn for you.



[2]

(b) Oliver closes the switch.

The variable resistor is at the minimum resistance.

The lamps are very bright.

Suggest **two** changes Oliver makes to this circuit to **decrease** the brightness of the lamps.

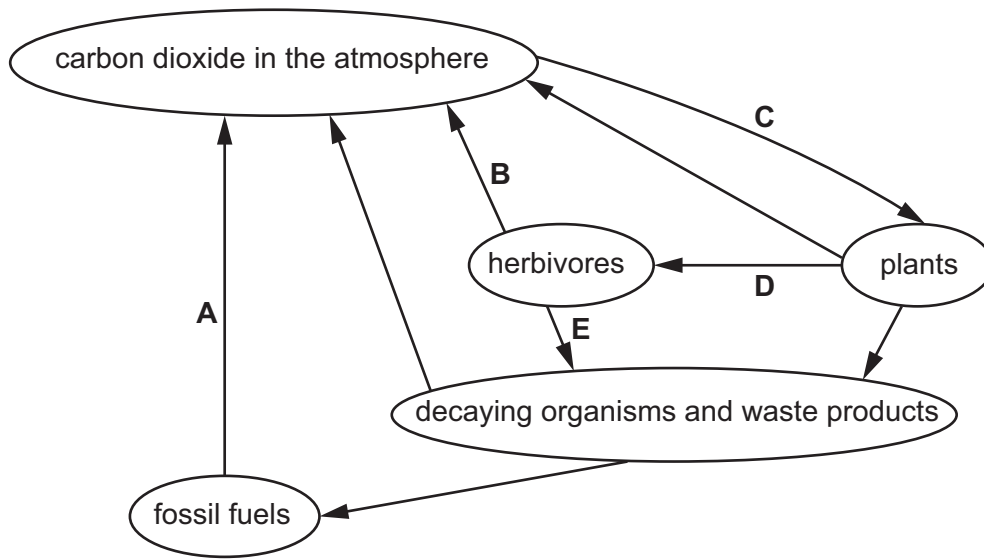
1

2

[2]

4 This question is about the carbon cycle and climate change.

(a) The diagram shows part of the carbon cycle.



Name the processes **A**, **B**, **C**, **D** and **E**.

Choose words from the list.

combustion

decomposition

feeding

photosynthesis

respiration

A

B

C

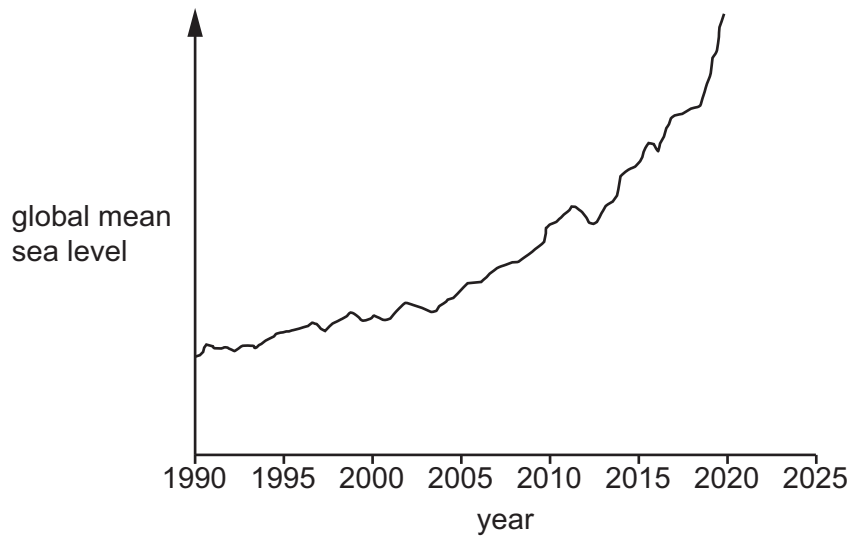
D

E

[3]

(b) Global mean sea level is an important indicator of climate change.

Look at the graph.



Suggest how the graph provides evidence of climate change.

Explain your answer.

suggestion

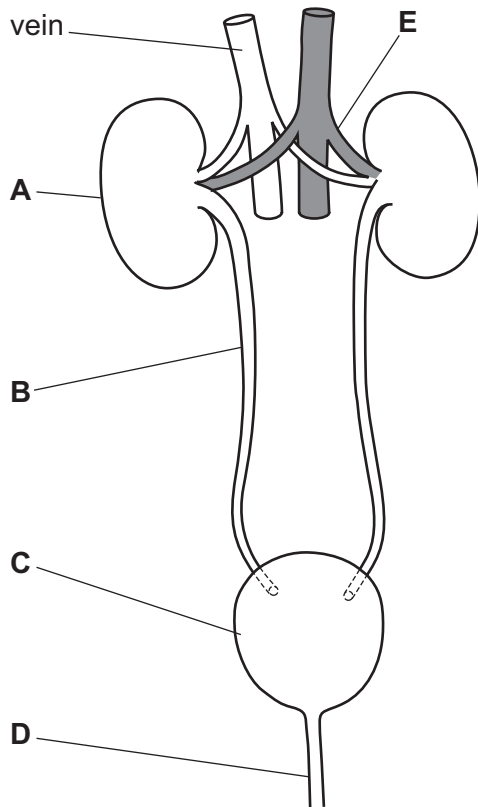
.....

explanation

.....

[2]

- 5 Look at the diagram of the human excretory (renal) system.



Draw a straight line to match each **function** to the correct **part** shown on the diagram.

function

part

filters blood

stores urine

transports urine to the bladder

A

B

C

D

E

[2]

- 6 The table shows some properties of the Group 7 elements.

element	melting point in °C	boiling point in °C	state at room temperature	electronic structure
fluorine	-220	-188	gas	2.7
chlorine	-101	-35	gas	2.8.7
bromine		59	liquid	2.8.18.7
iodine	114	184		2.8.18.18.7

Use ideas about trends going down the group to answer these questions.

- (a) Predict the **melting point** of bromine.

melting point = °C [1]

- (b) Predict the **state** of iodine at room temperature.

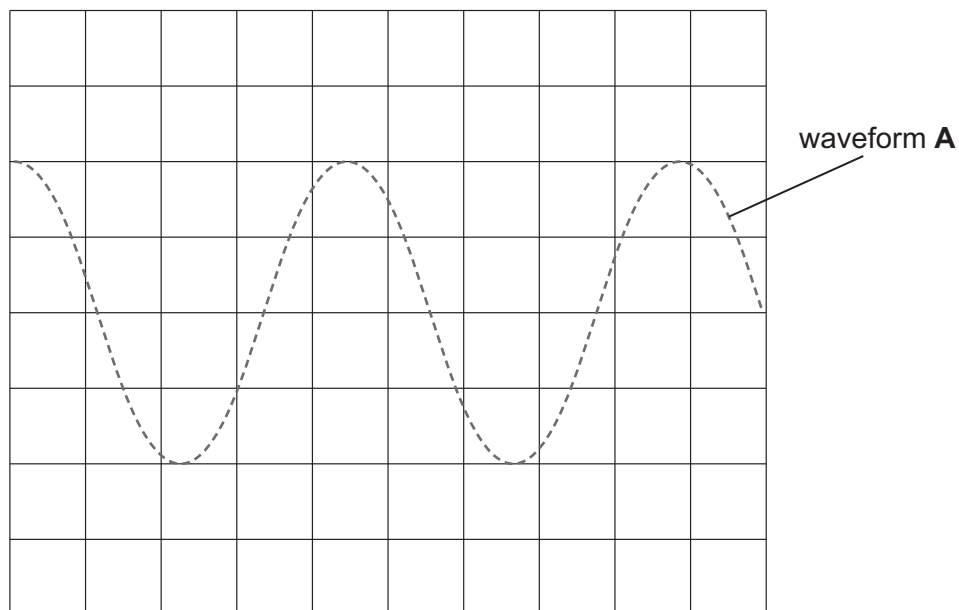
..... [1]

- (c) Elements exist in structures.

Write down the **type** of structure in fluorine.

..... [1]

7 Look at the diagram of waveform **A**.



(a) Waveform **B** has a greater frequency **and** the same amplitude.

Draw waveform **B** on the grid.

[2]

(b) Sound wave **B** has a greater frequency and the same amplitude as sound wave **A**.

Complete the sentences to compare sound wave **B** with sound wave **A**.

Choose from the list.

is higher

is lower

is the same

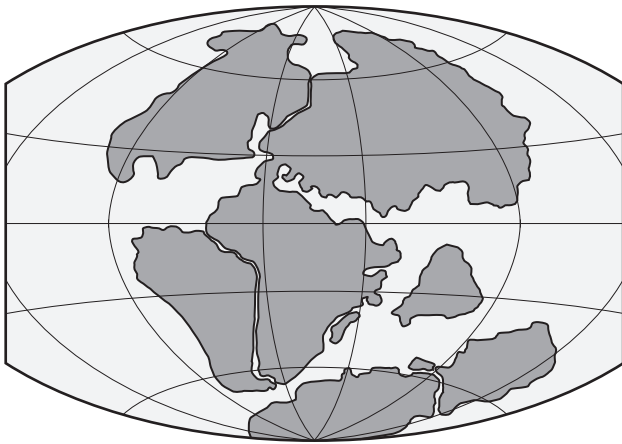
The pitch of sound wave **B**

The loudness of sound wave **B**

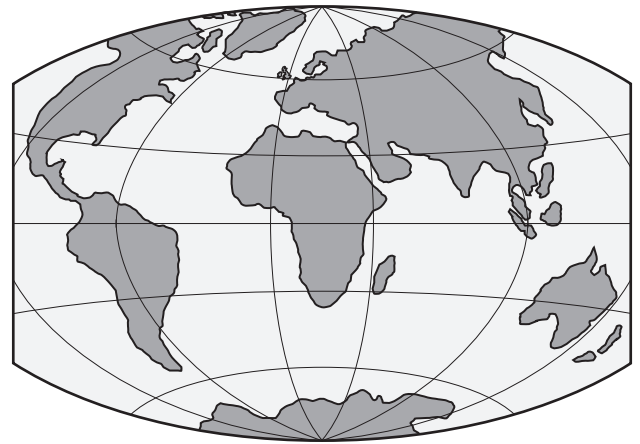
[1]

8 Chen looks at evidence for tectonic plates.

- (a) Look at the diagrams of the appearance of the Earth 145 million years ago and the present day.



145 million years ago



present day

- (i) Explain how the diagrams provide evidence for tectonic plates.

.....

.....

.....

..... [2]

- (ii) Explain **one** limitation of using these diagrams as evidence for tectonic plates.

.....

..... [1]

- (b) Write down **one other** piece of evidence for tectonic plates.

.....

..... [1]

- 9 Aiko investigates the reaction between solid magnesium and dilute hydrochloric acid.

Magnesium chloride solution and hydrogen are made.

- (a) Write down the **word** equation for this reaction.

..... [1]

- (b) Aiko wants to separate the magnesium chloride solution from the unreacted solid magnesium.

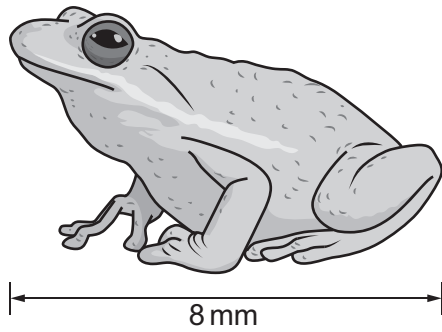
Name the process she uses to separate the magnesium chloride solution from solid magnesium.

..... [1]

- (c) Name the technique she uses to make magnesium chloride **crystals** from magnesium chloride solution.

..... [1]

10 The drawing shows a species of tree frog from an island.



The tree frog:

- lives in leaves on the floor of the forest
- is able to jump up to 30 times the length of its body
- feeds on small insects.

(a) Scientists use digital cameras to take photographs of these tree frogs on the floor of the forest.

The scientists use these photographs to estimate the tree frog population size.

Suggest **two** reasons why the scientists use digital cameras to estimate the tree frog population size.

- 1
-
- 2
-

[2]

- (b) Other scientists use a different method to estimate the tree frog population size.

These scientists record the sounds of the forest.

They count the number of tree frog calls they hear in the recording.

They:

- record the sounds from five different locations in the forest
- repeat the recordings in each location every day for one week.

- (i) Suggest why they record the sounds in five **different** locations.

.....
 [1]

- (ii) Suggest **two** reasons why they repeat the recordings in **each** location.

1

 2

[2]

- (c) The scientists estimate there is a large population of this species of tree frog on the island.

Suggest **two** environmental changes that **decrease** the population of this species of tree frog on the island.

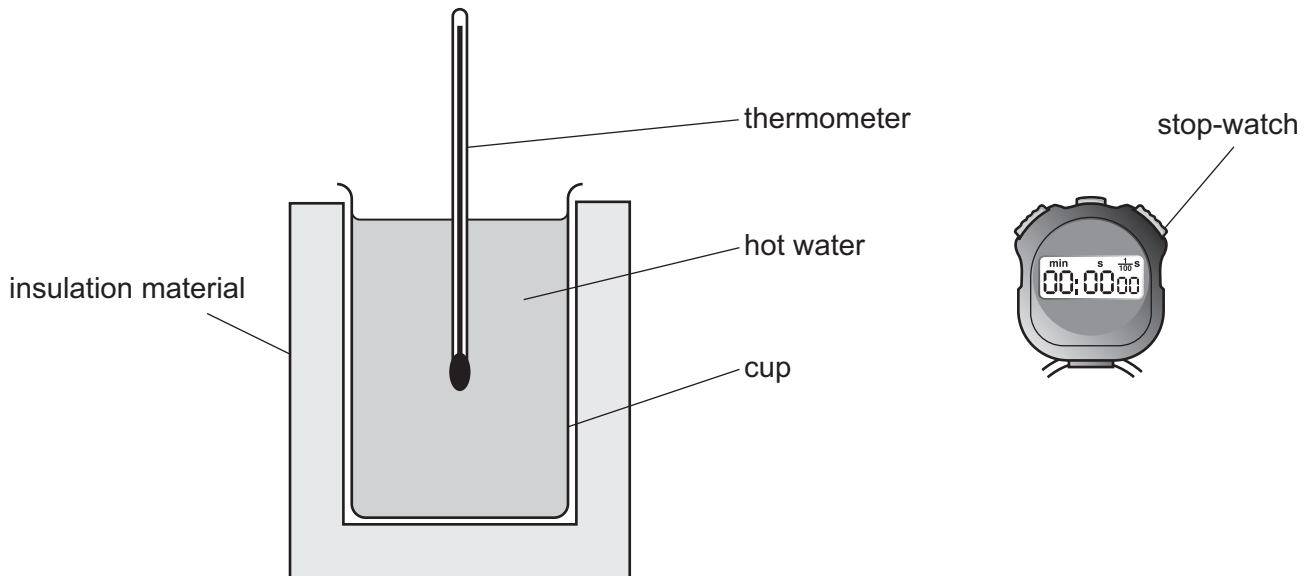
1

 2

[2]

- 11 Priya wants to investigate how the thickness of insulation material around a cup affects how quickly hot water cools.

Look at the equipment she uses.



- (a) Priya writes a hypothesis.

'I think the thicker the insulation material, the slower the hot water will cool.'

Write a plan for an investigation to test this hypothesis.

In your plan include:

- **two** variables to keep the same
- **one** variable to change
- measurements to take.

variables to keep the same

1

2

variable to change

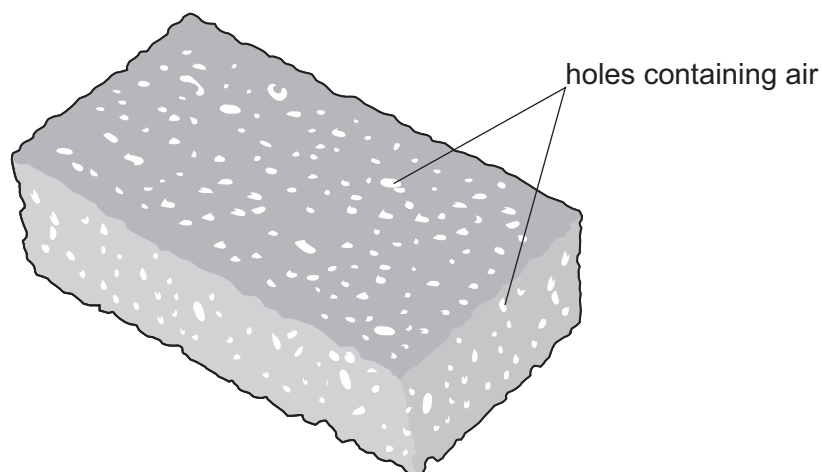
.....

measurements to take

.....

[4]

(b) Look at the diagram of the insulation material.



Complete the sentences to describe **two different** thermal energy transfer processes.

Air in the insulation material allows thermal energy transfer by the process

of

The solid in the insulation material allows thermal energy transfer by the process

of

[2]

(c) Some of the hot water in the cup evaporates.

Explain why evaporation causes cooling.

Use ideas about particles.

.....
 [1]

12 Scientists use the reacting particle model to explain how the rate of a chemical reaction is affected by:

- increasing the temperature
- increasing the concentration of one of the reactants.

Solid zinc carbonate reacts with dilute hydrochloric acid.

(a) Explain why increasing the **temperature** of the dilute hydrochloric acid increases the rate of the reaction.

.....

.....

..... [2]

(b) Explain why increasing the **concentration** of the dilute hydrochloric acid increases the rate of the reaction.

.....

.....

..... [2]

BLANK PAGE

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (Cambridge University Press & Assessment) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in our Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge International Education is the name of our awarding body and a part of Cambridge University Press & Assessment, which is a department of the University of Cambridge.

The Periodic Table of Elements

Group																	
1	2						3	4	5	6	7	8					
		1 Hhydrogen 1												2 Hehelium 4			
3 Li lithium 7	4 Be beryllium 9	Key atomic number atomic symbol name relative atomic mass										5 B boron 11	6 C carbon 12	7 N nitrogen 14	8 O oxygen 16	9 F fluorine 19	10 Ne neon 20
	11 Na sodium 23	12 Mg magnesium 24											13 Al aluminium 27	14 Si silicon 28	15 P phosphorus 31	16 S sulfur 32	17 Cl chlorine 35.5
19 K potassium 39	20 Ca calcium 40	21 Sc scandium 45	22 Ti titanium 48	23 V vanadium 51	24 Cr chromium 52	25 Mn manganese 55	26 Fe iron 56	27 Co cobalt 59	28 Ni nickel 59	29 Cu copper 64	30 Zn zinc 65	31 Ga gallium 70	32 Ge germanium 73	33 As arsenic 75	34 Se selenium 79	35 Br bromine 80	36 Kr krypton 84
37 Rb rubidium 85	38 Sr strontium 88	39 Y yttrium 89	40 Zr zirconium 91	41 Nb niobium 93	42 Mo molybdenum 96	43 Tc technetium —	44 Ru ruthenium 101	45 Rh rhodium 103	46 Pd palladium 106	47 Ag silver 108	48 Cd cadmium 112	49 In indium 115	50 Sn tin 119	51 Sb antimony 122	52 Te tellurium 128	53 I iodine 127	54 Xe xenon 131
55 Cs caesium 133	56 Ba barium 137	57–71 lanthanoids	72 Hf hafnium 178	73 Ta tantalum 181	74 W tungsten 184	75 Re rhenium 186	76 Os osmium 190	77 Ir iridium 192	78 Pt platinum 195	79 Au gold 197	80 Hg mercury 201	81 Tl thallium 204	82 Pb lead 207	83 Bi bismuth 209	84 Po polonium —	85 At astatine —	86 Rn radon —
87 Fr francium —	88 Ra radium —	89–103 actinoids	104 Rf rutherfordium —	105 Db dubnium —	106 Sg seaborgium —	107 Bh bohrium —	108 Hs hassium —	109 Mt meitnerium —	110 Ds darmstadtium —	111 Rg roentgenium —	112 Cn copernicium —	113 Nh nihonium —	114 Fl flerovium —	115 Mc moscovium —	116 Lv livermorium —	117 Ts tennessine —	118 Og oganesson —
lanthanoids																	
57 La lanthanum 139	58 Ce cerium 140	59 Pr praseodymium 141	60 Nd neodymium 144	61 Pm promethium —	62 Sm samarium 150	63 Eu euroium 152	64 Gd gadolinium 157	65 Tb terbium 159	66 Dy dysprosium 163	67 Ho holmium 165	68 Er erbium 167	69 Tm thulium 169	70 Yb ytterbium 173	71 Lu lutetium 175			
actinoids																	
89 Ac actinium —	90 Th thorium 232	91 Pa protactinium 231	92 U uranium 238	93 Np neptunium —	94 Pu plutonium —	95 Am americium —	96 Cm curium —	97 Bk berkelium —	98 Cf californium —	99 Es einsteinium —	100 Fm fermium —	101 Md mendelevium —	102 No nobelium —	103 Lr lawrencium —			