

Bohr diagram card sort

Name _____ Class _____ Mark _____ / 22

Complete and arrange the cards

[20]

- 1 Cut out the 20 cards. Do not use a periodic table until step 6.
- 2 Each card has one clue. Use it to fill in the numbers and the electron arrangement. Draw the electrons as crosses (x) on the rings. You will not need every ring on every card.
- 3 Some clues give a group and period instead of a number. If you are stuck, leave that card and come back to it after step 4.
- 4 Arrange the cards into groups and periods. Write each atomic number in the grid.
- 5 Answer the two questions below.
- 6 Now check with a periodic table. Fill in the element and symbol on each card.

Marks: 1 for each card with every box and the Bohr diagram correct, 1 for each question.

The grid

Group	1	2	3	4	5	6	7	8 (0)
Period								
1								
2								
3								
4								

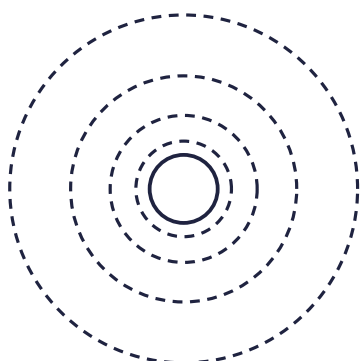
Questions

- A** What do the atoms of elements in the same group have in common? [1]

- B** What do the atoms of elements in the same period have in common? [1]

Clue: group 1, period 2

Element _____ Symbol _____



Mass no. **7**

Atomic no. _____

Protons _____

Neutrons _____

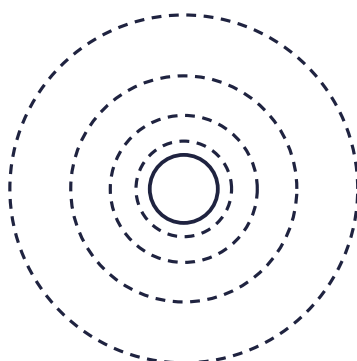
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: group 2, period 4

Element _____ Symbol _____



Mass no. **40**

Atomic no. _____

Protons _____

Neutrons _____

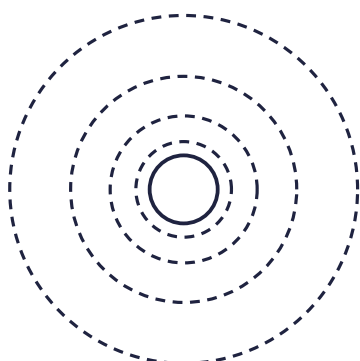
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 2 shells, outer shell full

Element _____ Symbol _____



Mass no. **20**

Atomic no. _____

Protons _____

Neutrons _____

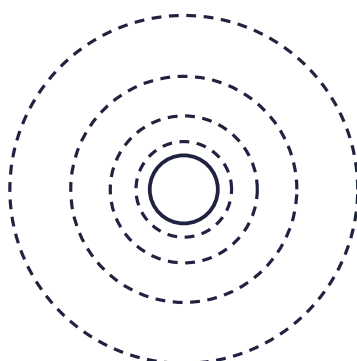
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: atomic number 4

Element _____ Symbol _____



Mass no. **9**

Atomic no. _____

Protons _____

Neutrons _____

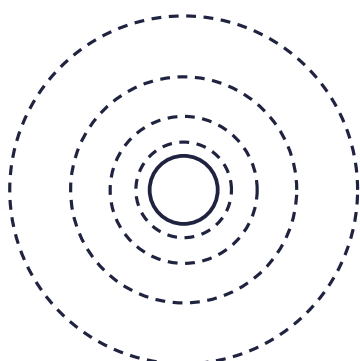
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 3 shells, 3 outer electrons

Element _____ Symbol _____



Mass no. **27**

Atomic no. _____

Protons _____

Neutrons _____

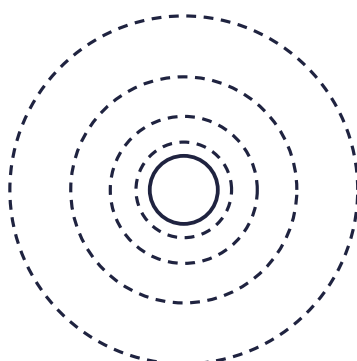
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 7 electrons

Element _____ Symbol _____



Mass no. **14**

Atomic no. _____

Protons _____

Neutrons _____

Electrons _____

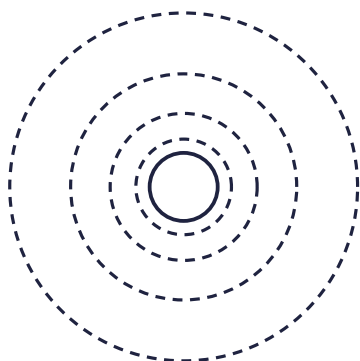
Group _____

Arrangement _____ Period _____



Clue: group 7, period 3

Element _____ Symbol _____



Mass no. **35**

Atomic no. _____

Protons _____

Neutrons _____

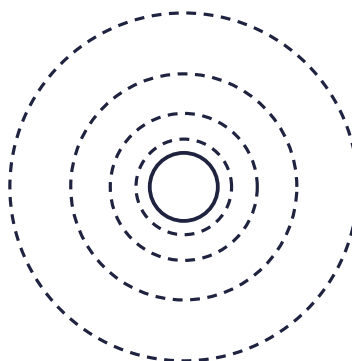
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: atomic number 19

Element _____ Symbol _____



Mass no. **39**

Atomic no. _____

Protons _____

Neutrons _____

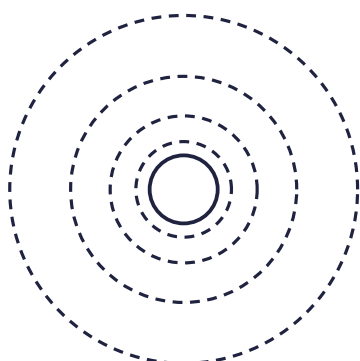
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: group 8 (0), period 1

Element _____ Symbol _____



Mass no. **4**

Atomic no. _____

Protons _____

Neutrons _____

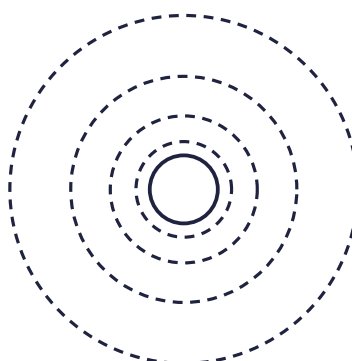
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 8 protons

Element _____ Symbol _____



Mass no. **16**

Atomic no. _____

Protons _____

Neutrons _____

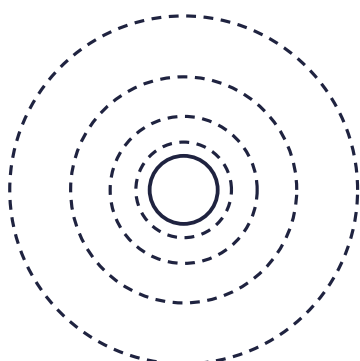
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: group 8 (0), period 3

Element _____ Symbol _____



Mass no. **40**

Atomic no. _____

Protons _____

Neutrons _____

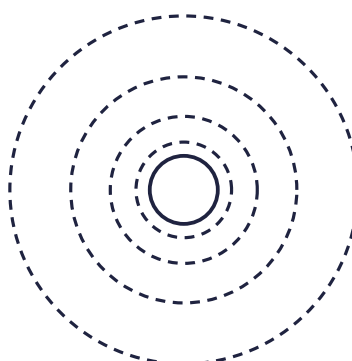
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 16 protons

Element _____ Symbol _____



Mass no. **32**

Atomic no. _____

Protons _____

Neutrons _____

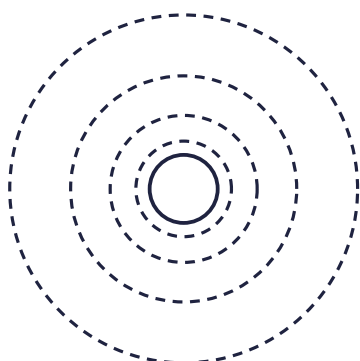
Electrons _____

Group _____

Arrangement _____ Period _____

**Clue: 1 proton**

Element _____ Symbol _____

Mass no. **1**

Atomic no. _____

Protons _____

Neutrons _____

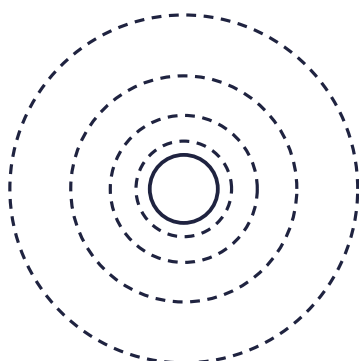
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: atomic number 11

Element _____ Symbol _____

Mass no. **23**

Atomic no. _____

Protons _____

Neutrons _____

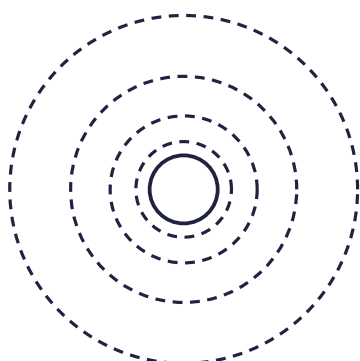
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 14 electrons

Element _____ Symbol _____

Mass no. **28**

Atomic no. _____

Protons _____

Neutrons _____

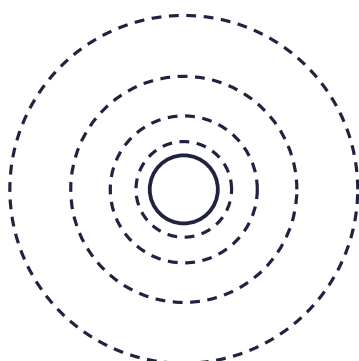
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 2 shells, 4 outer electrons

Element _____ Symbol _____

Mass no. **12**

Atomic no. _____

Protons _____

Neutrons _____

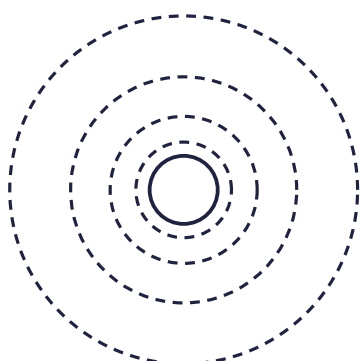
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: 2 shells, 3 outer electrons

Element _____ Symbol _____

Mass no. **11**

Atomic no. _____

Protons _____

Neutrons _____

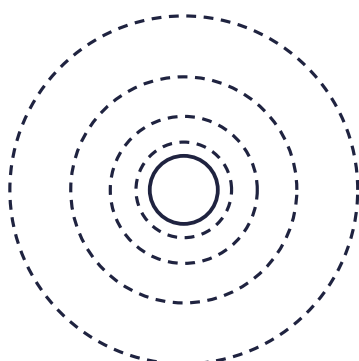
Electrons _____

Group _____

Arrangement _____ Period _____

Clue: group 7, period 2

Element _____ Symbol _____

Mass no. **19**

Atomic no. _____

Protons _____

Neutrons _____

Electrons _____

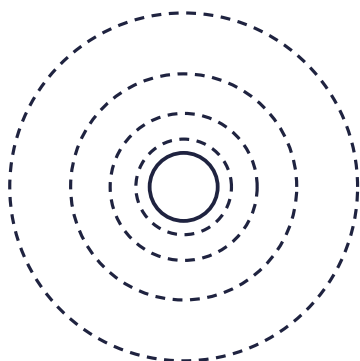
Group _____

Arrangement _____ Period _____



Clue: group 2, period 3

Element _____ Symbol _____



Mass no. **24**

Atomic no. _____

Protons _____

Neutrons _____

Electrons _____

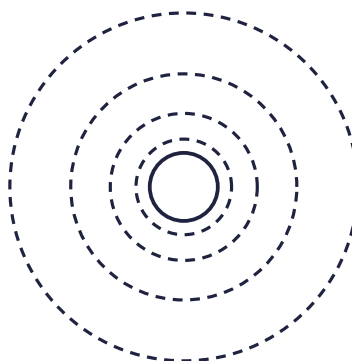
Group _____

Arrangement _____ Period _____



Clue: 3 shells, 5 outer electrons

Element _____ Symbol _____



Mass no. **31**

Atomic no. _____

Protons _____

Neutrons _____

Electrons _____

Group _____

Arrangement _____ Period _____