

SAMPLE LESSON PLAN FOR AUSBEL'S LEARNING THEORY

Name of the teacher _____

Date _____

Name of the School _____

Duration of the period :2 x40'

Subject : chemistry

Topic of the lesson : periodic classification of the elements

sub-topic : Arranging the first 18 elements

Grade 8 (eight)

| phases | | Instruction |
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| Presentation of advance organizer | Clarifying objectives of the lesson | <p>The students will be able to</p> <ul style="list-style-type: none"> Describe the atomic structure of elements Organize the first 18 elements of the periodic table according to their atomic number, number of electron shells and valence electrons. compare their order within the periodic table explain the term group and period |
| | Presentation of the advance organizer | Review the definitions of an element and an atom, the basic structures of an atom including the nucleus , protons , neutrons and electrons by giving some examples |
| | Prompting awareness of relevant knowledge | <p>The students will be asked the following questions</p> <p>1.what is atomic number ,atomic mass and valance electron s</p> |
| Making links to/ from the organizer | Presentation of learning task or learning material | Showing them figure of the periodic table and tell them each box contains information about different elements |

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| Strengthening of the cognitive organization | | <p>Choosing one of the first 18 elements on the periodic table, showing a class how to draw a model for that element using the element's atomic number. Pointing out how many electron shells are in the model, as well as the number of valence electrons or electrons in the outer most shell.</p> <p>Explaining the terms group and period using atomic structure</p> <p>The students will take notes during the presentation.</p> |
| | Elicit critical approach | <ul style="list-style-type: none"> • Asking the students to write the atomic structures of 5 (Na, O, N, Al and Ne) of the first 18 elements to determine their group and period. • The teacher will supervise the students while they are doing their activities. a few students will be invited to present their work to the class • After students presentation corrective feedback will be given by the teacher • Asking the students to summarize the core concepts of the lesson. <p>Such as determining groups and periods of some elements based on their atomic structure</p> |
| | Evaluation | <p>Dividing the class into small groups and giving each group 18 small cards.</p> <p>Without seeing the periodic table the students will be asked to arrange the first 18 elements in groups and periods based on the worksheet given below</p> |

work sheet

1. create a card for each of the first 18 elements of the periodic table include the following information at the top of each card leaving half the card empty.

- atomic number
- element symbol
- atomic name
- atomic mass

2. based on the facts on the card fill in the bottom of each card with the following information:

- number of protons, electrons and neutrons
- a model of an atom of that element
- number of electron shells in the atom
- number of valence electrons

3. Arrange the cards in order using the following rules

- cards must be placed in the order of their atomic number
- all cards in the same column must have the same number of valence electrons
- all cards in the same row must have the same number of electron shells