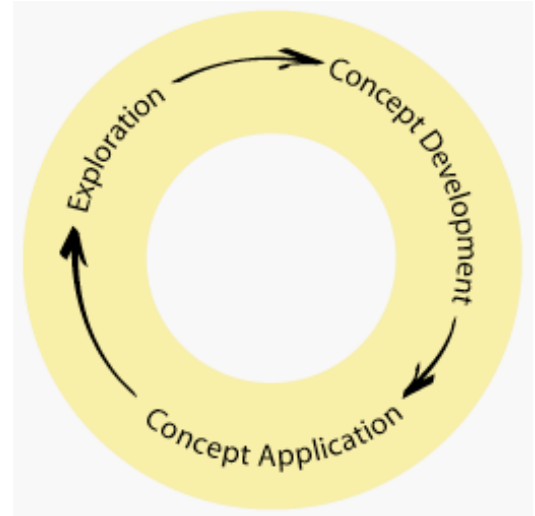


# The Learning Cycle

A three-part model of scientific inquiry that encourages students to develop their own understanding of a scientific concept, explore and deepen that understanding, and then apply the concept to new situations.

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The learning cycle is a model of instruction based on scientific inquiry. This model encourages students to develop their own understanding of a scientific concept, explore and deepen that understanding, and then apply the concept to new situations.



## **Exploration**

In the first phase, students work on their own or in small groups to explore scientific phenomena, manipulate materials, and attempt to solve problems. The teacher acts as facilitator, posing questions and providing assistance as needed. Students have the opportunity to develop their own hypotheses and to test them through a hands-on experiment or observation.

## **Concept development**

In the second phase of the learning cycle, the teacher leads the students through the introduction and development of the scientific concepts central to the lesson. The students may begin by sharing their observations and ideas from the exploration phase. The teacher may then use written or audio-visual materials to develop the concept and introduce relevant vocabulary.

## **Concept application**

The teacher now poses a new problem or situation for the students to solve based on their initial exploration and on the concepts they refined in the second phase. As in the first phase, the students work individually or in small groups while the teacher acts as facilitator. The learning cycle may then begin again, as these hands-on activities become the starting point for the exploration and development of a related concept.