

Observation

What is an observation?

Concept Attainment Strategy

- 1) The teacher provides examples and non-examples of the concept. These can often be presented as a “Yes” (examples) and a “No” (non-examples).
- 2) Examples and non-examples are presented one set at a time.
Teacher has students focus on what the examples have in common (common attributes).. The teacher may provide other instructions, depending on age, complexity of the concept, and student familiarity with concept attainment. (eg. “Focus on the examples’ properties rather than their locations”).
Teacher also suggests to look at the non-examples and identify what attribute may be missing that makes it a non-example.
Developing opposite concepts (eg. cause and effect) can accomplished by making a “Group A” and a “Group B.” Group A becomes the example for one concept and Group B the non-examples of the other concept, and vice-versa.
- 3) As examples and non-examples are presented, students are asked to hypothesize about the concept. In other words, students try to identify the essential attributes of the concept (and all the examples. If a student thinks she knows what the attributes are, she should provide an example rather than state what the attributes are to give others the opportunity to keep thinking.
- 4) Teacher encourages students to share the thinking that occurred during the process.
eg. “I thought the examples were _____, but when you presented the _____ example, my hypothesis did not fit any more.”
- 5) When the concept and essential attributes are identified, the teacher can provide examples and non-examples for students to classify as examples or non-examples and justify their classification; the students can be asked to find or generate more examples.

What is an Observation?



Yes

**The baby is
wearing a
yellow bow.**

No

**The baby's
mother made
the bow.**



Yes

**The baby is
wearing a
yellow bow.**

**The baby is
smiling.**

No

**The baby's
mother made
the bow.**

**The baby is
happy to see a
kitten.**



Yes	No
The baby is wearing a yellow bow.	The baby's mother made the bow.
The baby is smiling.	The baby is happy to see a kitten.
The baby is on a blanket.	The blanket was a gift.



Yes	No
The baby is wearing a yellow bow.	The baby's mother made the bow.
The baby is smiling.	The baby is happy to see a kitten.
The baby is on a blanket.	The blanket was a gift.
Can you make another observation?	

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Yes

The plant is prickly.

No

I think this is calla a Burr

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Yes

The bark is rough.

No

This is an old tree.

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Yes

The mirror is smooth.

No

I can see myself in the mirror.

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Yes

Can you make another observation for any of the objects?



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Yes

**The lemon is
sour.**

No

**Lemons grow
on trees.**



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Yes

No

**The lemon is
sour.**

**Lemons grow
on trees.**

**The pepper is
hot.**

**I don't like hot
food.**

**Can you make an observation
about the object below?**





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Yes	No
The pond smells a bit stinky.	Ponds are important.
The city traffic smells like gas.	I live in a city
Can you make another observation?	

Close your eyes
and listen.

What
observations can
you make?

Yes	No
I can hear the teacher next door.	The teacher next door is Ms. Smith.

Close your eyes
and listen.

What
observations can
you make?

Yes	No
I can hear the teacher next door.	The teacher next door is Ms. Smith.
I hear a buzzing.	I don't know where the buzzing is coming from

Close your eyes
and listen.

What
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Yes	No
I can hear the teacher next door.	The teacher next door is Ms. Smith.
I hear a buzzing.	I don't know where the bussing is coming from
Can you make another observation?	

*What is an
Observation?*

*An observation
is what we
notice with our
senses.*



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What are some observations you could make if you were standing here?

Students

Educators

1. *Use their senses, as appropriate, for making observations of objects, places and events in their surroundings*

Provide intentional opportunities for students to actively use all of their senses (e.g., sight, hearing, smell, touch, taste, etc.) in multiple different contexts.

Model how to safely use the senses to make observations (e.g., do not taste anything unless a trusted adult says it is okay; be aware of students' food or other allergies).

1. *Use tools and instruments to extend their capacity to observe both qualitatively and quantitatively*

Provide students with opportunities to practice using age-appropriate tools that extend their ability to observe (e.g., the proper use of magnifying lenses, microscopes, thermometers, rulers, measuring tapes, simple balance scales).

1. *Observe in order to notice details (e.g., characteristics and properties of objects and events such as colour, shape, size, pattern, texture, temperature, duration)*