Cause & Effect
and
Impact

Concept Attainment

Concept Attainment Lesson Steps

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 things she knows what the attributes are, she should provide and 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;

NOTE

Students should understand the concept “relationship” and “concept map” prior to completing this activity.

Cause & Effect

Concept Attainment

What do the ideas in each group have in common?

Group A	Group B
The sun was shining brightly.	*I put on some sunscreen.*

What do the ideas in each group have in common?

Group A	Group B
The sun was shining brightly.	*I put on some sunscreen.*
The ball was coming directly at me.	*I ducked.*

What do the ideas in each group have in common?

Group A	Group B
The sun was shining brightly.	*I put on some sunscreen.*
The ball was coming directly at me.	*I ducked.*
No one threw their wrappers in the garbage.	*The halls looked untidy.*

What do the ideas in each group have in common?

Put these statements either in Group A or Group B.

"I drank some water."

"I was thirsty."

Group A	Group B
The sun was shining brightly.	*I put on some suntan lotion.*
The ball was coming directly at me.	*I ducked.*
No one threw their wrappers in the garbage.	*The halls looked untidy.*

What do the ideas in each group have in common?

What is **similar** to all the items in Group A. Group B?

What is a **good name** for Group A? For Group B?

Group A	Group B
The sun was shining brightly.	*I put on some sun-tan lotion.*
The ball was coming directly at me.	*I ducked.*
No one threw their wrappers in the garbage.	*The halls looked untidy.*
"I was thirsty."	*"I drank some water."*

What do the ideas in each group have in common?

Cause is something that makes other things happen.

Causes explain "why something happened."

Effect is a change or an action that happens **because of something else.**

Effects explain "what happened."

CAUSE	EFFECT
The sun was shining brightly.	*I put on some sun-tan lotion.*
The ball was coming directly at me.	*I ducked.*
No one threw their wrappers in the garbage.	*The halls looked untidy.*
"I was thirsty."	*"I drank some water."*

CAUSE:

*What might be a **cause** the situation below?*

Situation:

I was so excited that I lept off the chair and danced around the house while I screamed “Woo Hoo!

EFFECT:

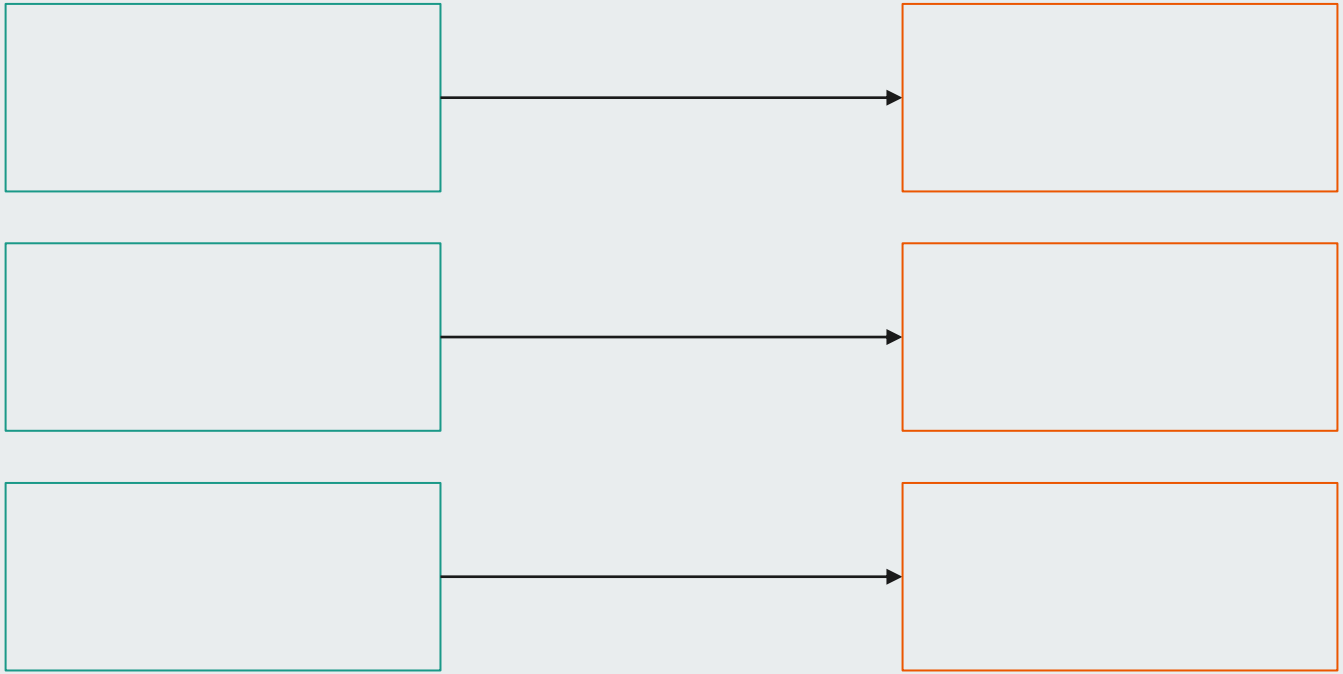
*What might be an **effec**t of the situation below?*

Situation:

I was so excited that I lept off the chair and danced around the house while I screamed “Woo Hoo!

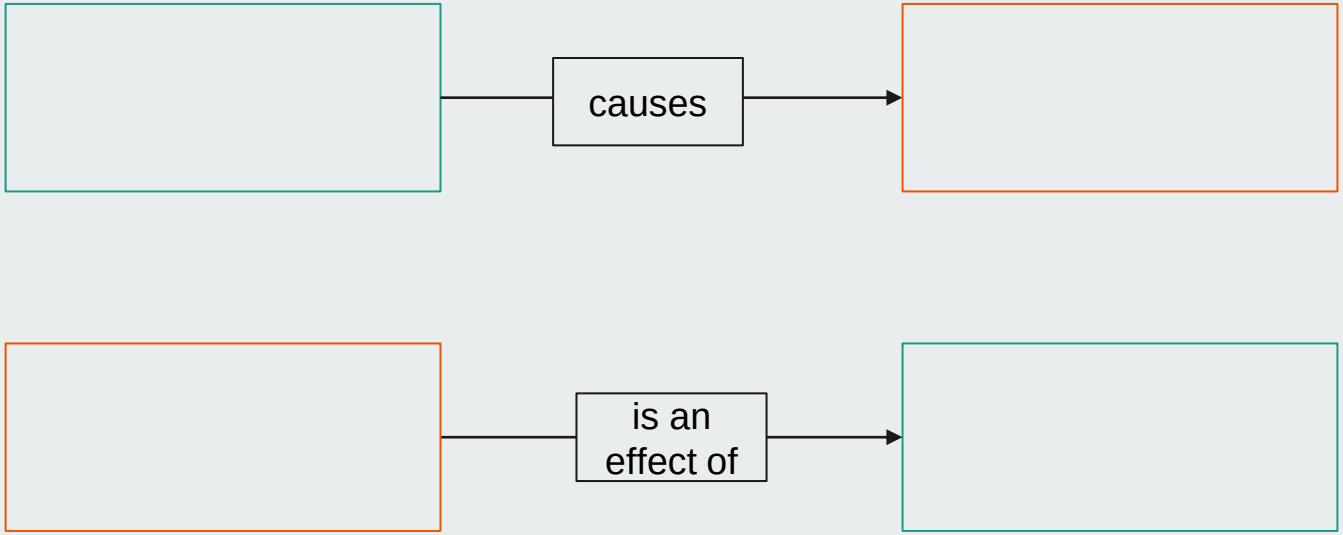
Practice

Make up your own causes and effects.



Cause - Effect Relationship

Make up your own causes and effects.



Cause-Effect Relationship

Arrange the following events in a concept map to show how they are related.

I have to walk on crutches

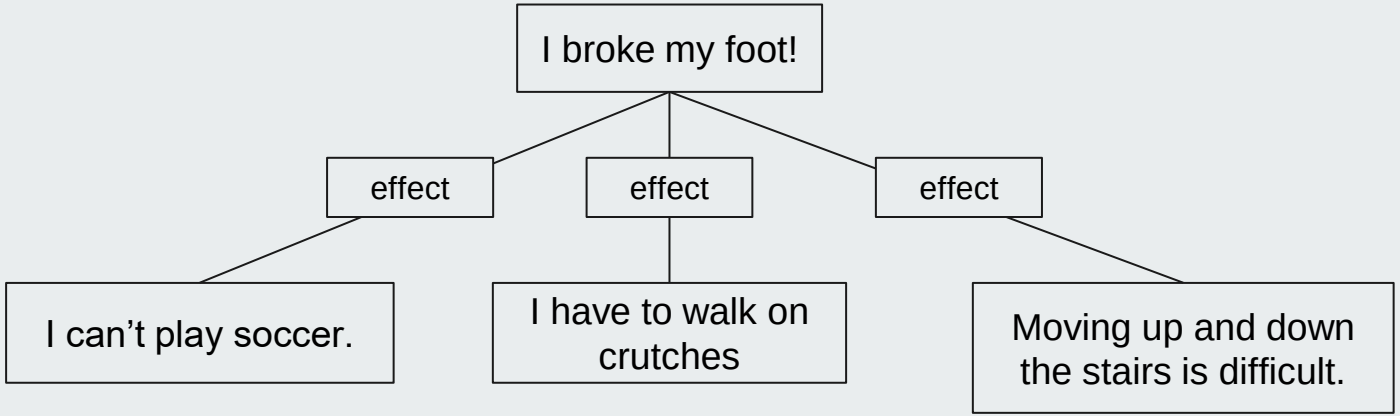
I can’t play soccer.

I broke my foot!

Moving up and down the stairs is difficult.

Cause-Effect Relationship

Sample arrangement.

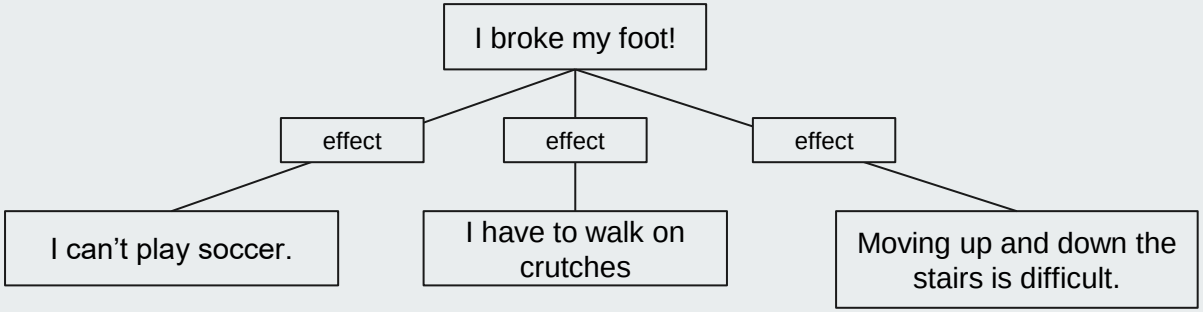


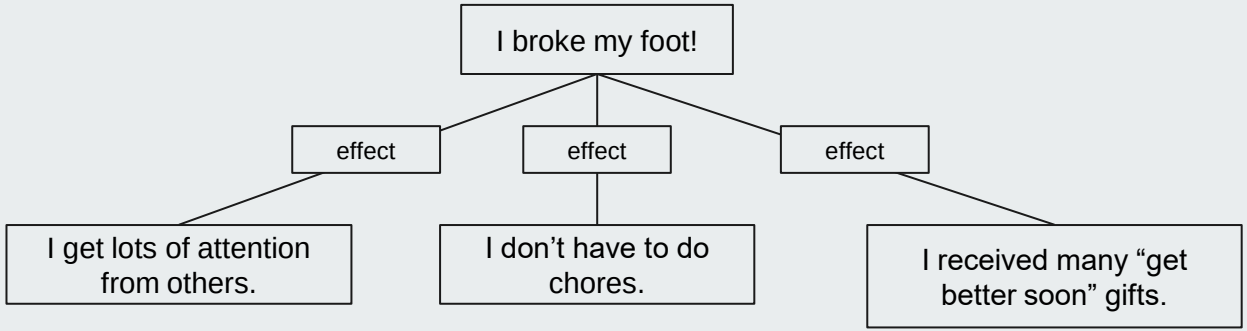
Impact

Concept Attainment & Concept Maps

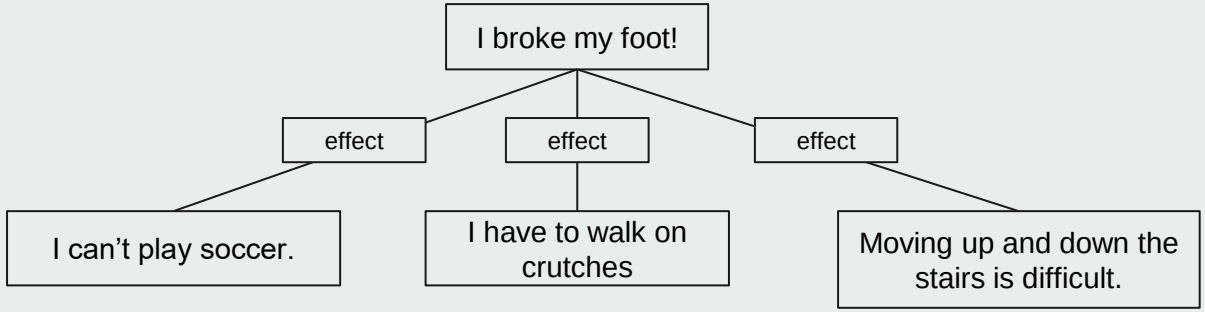
In what way are these two concept maps **similar?**

In what ways are these two concept maps **different?**

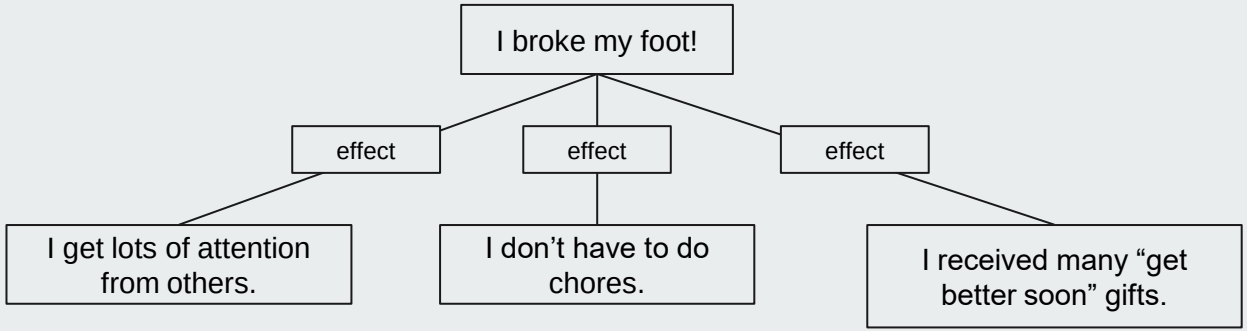




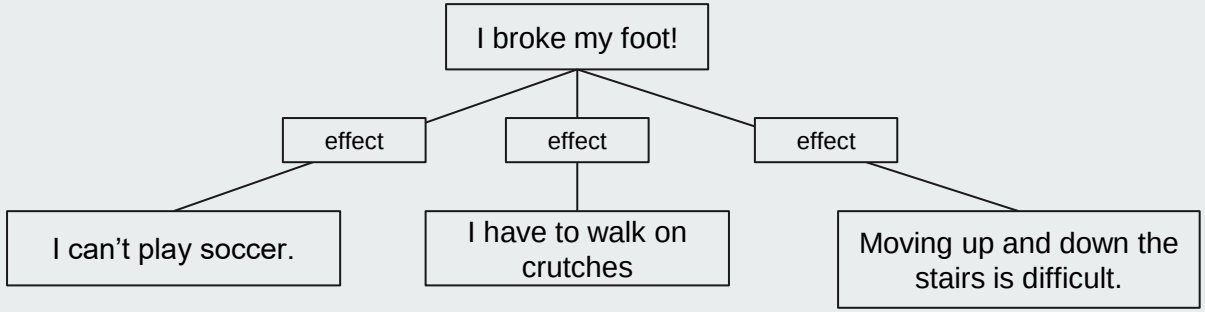
The **top** concept map has **effects** that are bad.



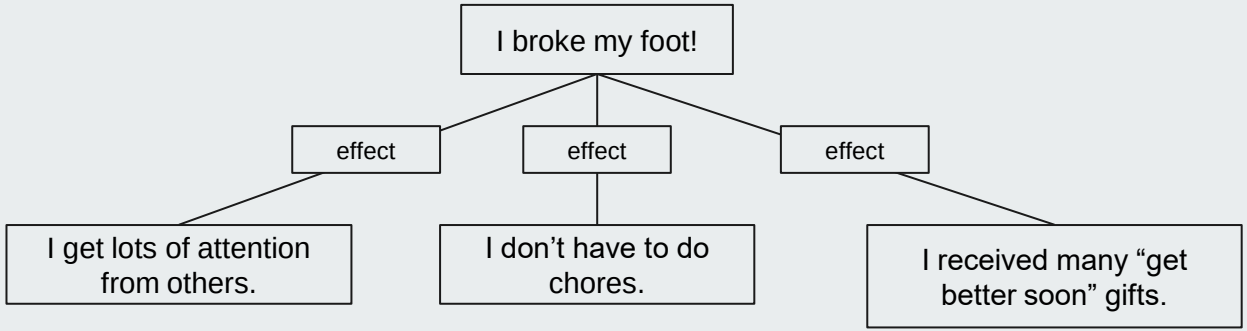
The **bottom** concept map has **effects** that are good.



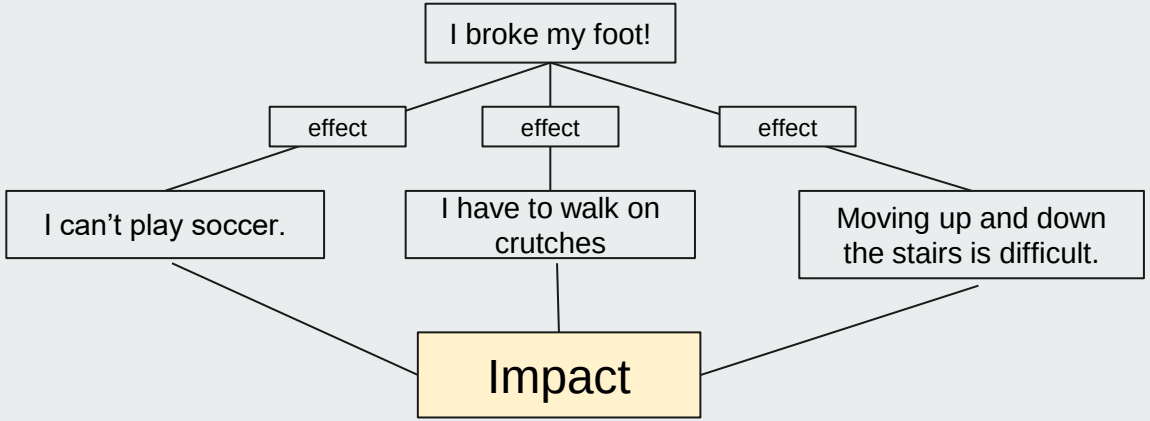
Things that are considered bad, hurtful or harmful are called **negative.**

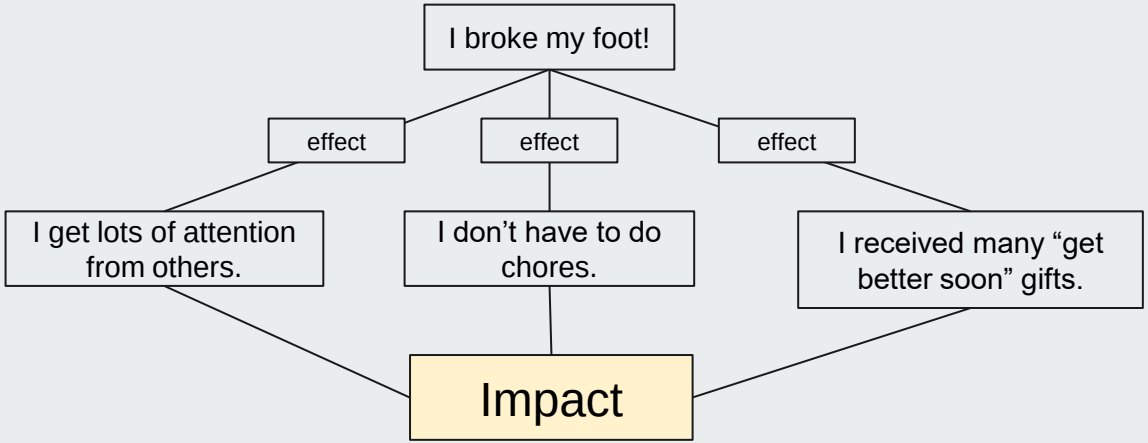


Things that are considered good or helpful are called **positive.**



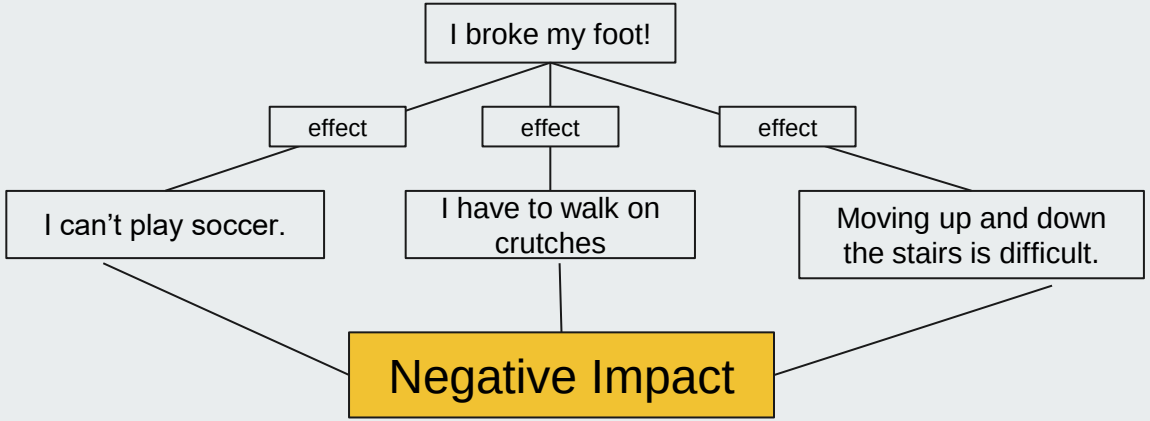
When the effects are combined, they become an **IMPACT**

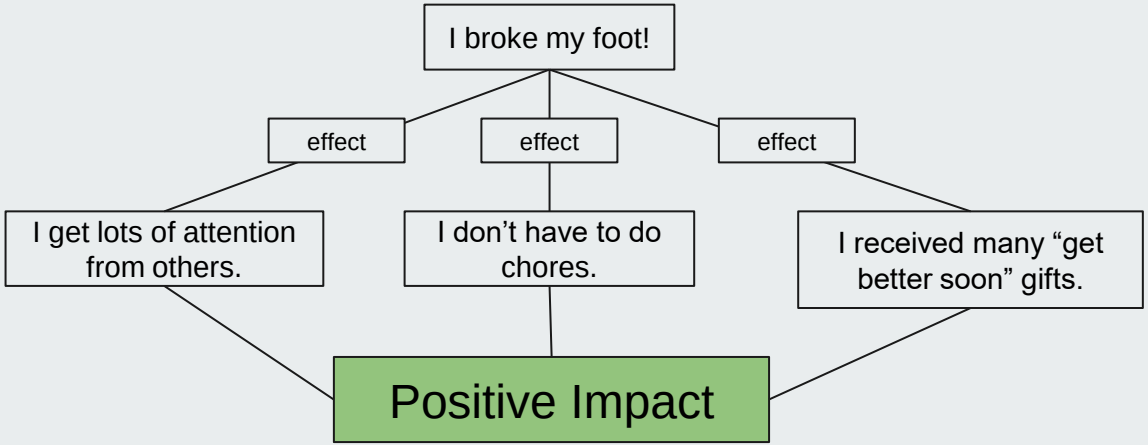




Some actions have a **negative impact** because the **effects are negative**

Some actions have a **positive impact** because the **effects are positive.**





Explain how shoveling the snow from your neighbor's driveway can have a **positive and negative impact.**