The task: you are given a pair of paragraphs. Please choose the correct label:

- **(Not Analogy)**
- **(Analogy) - choose one of Self analogy / Close analogy / Sub Analogy or Far analogy**

<u>Labels Key:</u>

(Not Analogy): The texts are not analogous to each other.

(Analogy): The texts are analogous to each other.

(Self analogy): The two texts are exactly on the same topic (it can be other text versions or paraphrasing)

(Close analogy): The two texts are on a similar topic.

(Far analogy): The two texts are on totally different topics.

(Sub Analogy): A part of one process is analogous to a part of another process.

* To be a sub analogy the similar sub process should contain **at least two similar relations(will be clear in the examples 9-10)**

It's important to emphasize the difference between analogy (for example far analogy) and sub analogy - in far analogy we say there is an analogy between the main processes, while in sub analogy we found a subprocess that is hidden in one of the main processes, and for him, we found an analogy.

This table can help:

Analogy type	Domain	Entities	Abstraction
Self analogy	the same	the same	no
Close analogy	close	possibly different	low
Far analogy	different	different	high

Figure 1: Types of analogies

Let's see some examples!

Example 1:

paragraph ID: 1136 (**PROMPT**: How do owls hunt at night?)

Owls have specially adapted eyes that see better at night.
Owls sit at high points in trees and look around.
When an owl spots a rodent they track it.
When the rodent is standing still the owl swoops down.
The owl grabs the rodent with their tallons.
The owl uses their beak to eat the rodent.

paragraph ID: 1137 (**PROMPT**: How do owls hunt at night?)

Owls hunt around their hunting territory away from where they roost during the day.
They sit still on a perch, like a stump of branch, and wait for prey.
They use their highly sensitive hearing to locate prey that cannot be seen.
They use their very keen vision to see prey in the dark.
They fly silently, without flapping their wings, in order to surprise the prey.
The owl silently glides or drops on its prey, grabbing it with its talons and beak.
The owl eats the prey, or carries it back to its perch.

Answer: Self analogy
Notice that according to the PROMPTS we see that it's on exactly the same topic (but also if the prompts are not identical, it can be still on the same topic so of course we should read the texts). hence, self analogy.

Example 2:

paragraph ID: 139 (**PROMPT**: How do the lungs work?)
Air enters the nose or mouth and travels through the windpipe into the lungs.
The lungs have a series of smaller and finer tubes and sacs.
Air reaches the smallest and finest air sacs called alveoli.
Oxygen travels from the alveoli into the blood.
Oxygen-rich blood is carried to the heart.
Oxygen-rich blood is pumped throughout the body by the heart.
Cells take in the oxygen rich blood and release carbon dioxide rich blood.
The carbon dioxide rich blood travels to the lungs.
Carbon dioxide travels through the throat and is exhaled.

paragraph ID: 617 (**PROMPT**: Describe how oxygen reaches cells in the body)

The human body takes a breath inward.
Air is transported to the lungs.
Air reaches the alveoli, the smallest air sacs in the lungs.
In the alveoli, air passes into the blood within small capillaries.
The gaseous oxygen in the air dissolves into the capillary blood.
The dissolved oxygen is picked-up by red blood cells.
The red blood cells bind the oxygen via a protein called heme.
Red blood cells circulate throughout the body and reach the various tissues.
Within small capillaries, the heme release the oxygen.
The oxygen can then reach the cells within the tissue.

Answer: Self analogy
Notice that the PROMPTS are different, but the paragraphs are actually on the exact same topic, just another text version, hence, self analogy.

Example 3:

paragraph ID: 22 (**PROMPT**: How are valleys formed?)

A large rocky area is formed.
The rocky area has a higher elevation than the surrounding areas.
Water from precipitation falls in the area.
The water forms a stream.
The stream flows towards lower elevation.
The stream becomes a river.
The river continues to flow along the same path for a long time.
The river erodes the rocky area that it touches.
The eroded area cuts deeply into the rock.

paragraph ID: 64 (**PROMPT**: How are ravines formed?)
An area is at a higher elevation than the surrounding area.
Rain falls.
Water is in the area of high elevation.
The water creates a stream.
The stream moves towards lower elevation.
The stream continues along the same path for a long time.
The soil and rocks erode where the stream touches them.
The stream moves deeper into the soil.
The stream is smaller than the eroded area.

Answer: Close analogy
Notice that according to the PROMPTS we can understand that the authors were given to write on a different topic(which is very similar but not exactly the same), the entities and the processes are very similar(but not the same), hence it's a close analogy.

Example 4:

paragraph ID: 43 (**PROMPT**: How does rain form?)

Oceans, lakes, and rivers contain water.
The sun heats up the water.
The water evaporates from the heat.
The water moves to the sky as steam or as invisible vapor.
The water forms clouds in the sky.
The clouds become larger as they are filled with more water.
The air is cooled.
Water forms droplets in the clouds.
The droplets fall to earth as rain.

paragraph ID: 56 (**PROMPT**: How does snow form?)

The air is cold.
Water is in the air.
The water forms tiny ice crystals.
The ice crystals collide with each other.
The ice crystals stick to each other.
The ice crystals get bigger as more of them stick together.
The ice crystals get too heavy to be in the air.
The ice crystals become snowflakes.
The snow flakes fall to the ground as snow.

Answer: Close analogy
Notice that according to the PROMPTS we can understand that the authors were given to write on a different topic(which is very similar but not exactly the same), the entities and the processes are very similar(but not the same), hence it's a close analogy.

Example 5:

paragraph ID: 112 (**PROMPT**: What happens during photosynthesis?)

Carbon dioxide enters the leaf through the stomates.
Water is absorbed by the plant and transported to the leaves.
Sunlight is captured by the plant.
Energy in the form of ATP is made from the sun's energy.
Carbon dioxide, water, and ATP form sugars via the Calvin cycle.
Oxygen is given off as a byproduct.
Oxygen leaves the leaf through the stomates.
Water is reused or it leaves the leaf.
The sugars can be used by the plant to make cellulose.

paragraph ID: 1148 (**PROMPT**: How does a solar panel work?)

Solar panels actually comprise many, smaller units called photovoltaic cells.
Photovoltaic simply means they convert sunlight into electricity.).
Many cells linked together make up a solar panel.
Each photovoltaic cell is basically a sandwich made up of two slices of semi-conducting material, usually silicon : .
Manufacturers "dope" silicon with other materials, giving each slice of the sandwich a positive or negative electrical charge.
This adds extra electrons, with a negative charge, to that layer.
Meanwhile, the bottom layer gets a dose of boron, which results in fewer electrons, or a positive charge.
This all adds up to an electric field at the junction between the silicon layers.
When a photon of sunlight knocks an electron free, the electric field will push that electron out of the silicon junction.
A couple of other components of the cell turn these electrons into usable power.

Answer: Far analogy
Notice that the entities and domains are totally different.
Both solar cells and plants harvest energy from sunlight. Photovoltaic solar cells collect sunlight and change it into electricity. Plant leaves gather sunlight and convert it into stored chemical energy. Both solar cells and plants are doing the same job, but they do it in different ways.
Hence, it's a far analogy.

Example 6:

paragraph ID: 1293 (**PROMPT**: Describe the typical steps in making coffee).

The carafe is filled with water.
The water is poured into the machine at the back.
Coffee beans are put into a grinder.
The grinder is activated.
A filter is put into the coffee maker.
The ground coffee is put into the filter.
Sometimes a bit of salt is added to the grounds to bring out flavor.
The top of the machine is closed.
The power is turned on.
The water passes through the grounds and becomes coffee.

paragraph ID: 1048 (**PROMPT**: How do you use a dishwasher?)

Rinse the dishes before placing them in a dishwasher.
Load glasses and plastic wear on the top rack.
Put plates, bowls, pots, and pans on the bottom rack.
Place all the utensils in the utensil basket.
Put detergent into the detergent holder.
Close the door and push the start button.

Answer: Far analogy
Totally different entities, different domains, and it requires high abstraction to see the analogy. We can notice that both processes describe the steps to operate a machine from the beginning till pressing the start button, hence its a far analogy.

Example 7:

paragraph ID: 721 (**PROMPT**: How are clouds formed?)

Water vapor is in warm air.
The warm air cools.
The warm air expands.
The water vapor in the air condenses.
The water vapor forms water droplets or ice crystals.

paragraph ID: 229 (**PROMPT**: How do dams help stop flooding?)

A dam is built in an area prone to flooding.
A large amount of rain occurs.
The water builds up behind the dam.
The dam opens its floodgates when it starts to get full.
The water flows into a river below the dam.
The dam closes its gates.
The dam will occasionally open its gates again to gradually release more water.
Eventually all of the floodwater will be slowly released into the river without causing any flood damage.

Answer: Not analogy
Totally different entities, different domains.
We can't see any analogy between the processes, hence its Not analogy (and not Far analogy)

Example 8:

paragraph ID: 1298 (**PROMPT**: How do kidneys filter blood?)

Blood carried into the kidney by the renal artery.
Nephrons in the kidney filter the blood.
The waste that is filtered out mixes with water.
Become urine.
Ureters carry urine out of the kidneys.

paragraph ID: 1105 (**PROMPT**: How do mountains form?)
Pressure happens underground.
Tectonic plates underground pull and stretch.
Small cracks are formed in the earth's crust.
The tectonic plates push hard against each other.
Some parts of the earth's crust move up high above the ground.

Answer: Not analogy
Totally different entities, different domains.
We can’t see any analogy between the processes, hence its Not analogy (and not Far analogy)

Example 9:

paragraph ID: 14 (**PROMPT**: What happens during the water cycle?)
Water from oceans, lakes, rivers, swamps, and plants turns into water vapor.
Water vapor forms droplets in clouds.
Water droplets in clouds become rain or snow and fall.
Some water goes into the ground.
Some water flows down streams into rivers and oceans.

paragraph ID: 22 (**PROMPT**: How are valleys formed?)

A large rocky area is formed.
The rocky area has a higher elevation than the surrounding areas.
Water from precipitation falls in the area.
The water forms a stream.
The stream flows towards lower elevation.
The stream becomes a river.
The river continues to flow along the same path for a long time.
The river erodes the rocky area that it touches.
The eroded area cuts deeply into the rock.

Answer: Sub analogy
See in bold similar relations:
Water droplets in clouds become rain or snow and fall | Water from precipitation falls in the area.
Some water goes into the ground | Water from precipitation falls in the area.
Some water flows down streams into rivers and oceans. | The stream flows towards lower elevation.

We found a sub process of water that falls to the ground, and flows down, which is in both texts. It contains at least two similar relations, hence it's a sub analogy.

Example 10:

paragraph ID: 548 (**PROMPT**: Describe how the liver works)

The liver removes toxins from the blood.
Liver also cleans blood that has just been enriched with vitamins and minerals during digestion.
Liver processes the good stuff into forms that the rest of the body can use.
Waste or stuff your body doesn't need can be carried by bile back into the intestine or into the kidneys.
The liver also produces a digestive juice called bile that helps the body absorb fat into the bloodstream.
The liver also stores extra carbohydrates as glycogen for the body to use as fuel when needed.

paragraph ID: 367 (**PROMPT**: How do plants obtain and use water?)
Plants obtain water through the soil they are growing in.
The plants roots absorb the water from the soil.
Transport the water to the parts of the plant where the water is needed.
The plant uses the water as part of the photosynthesis process.
The plant creates food, called glucose, for itself.
The plant uses water to circulate the glucose around the plant to deliver the glucose to where it's needed.

Answer: Sub analogy
See in bold similar relations:
The liver produces digestive juice | The plant creates food.
The liver stores glycogen for the body as fuel when needed | The plant delivers glucose to where it’s needed.

We found a sub process of producing food / juice and delivering fuel / glucose to where it’s needed.It contains at least two similar relations, hence it’s a sub analogy.