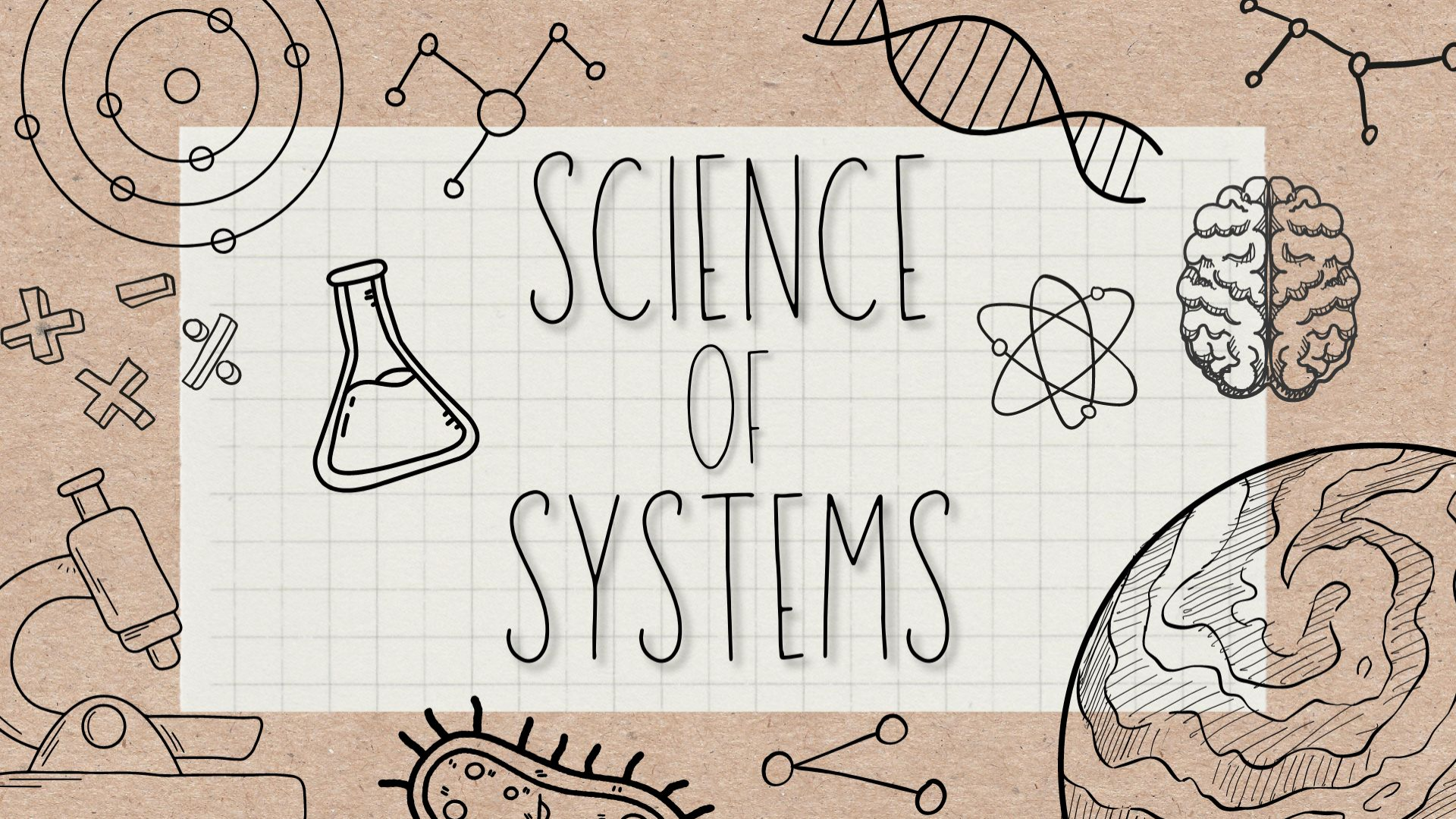


SCIENCE OF SYSTEMS



SKILL STATIONS

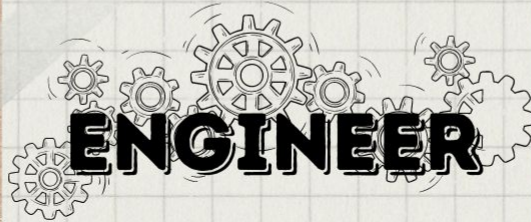
30:00

Create



Add task or
students here

ENGINEER

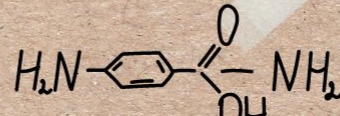


Add task or
students here

SOLVE



Add task or
students here

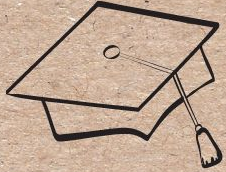




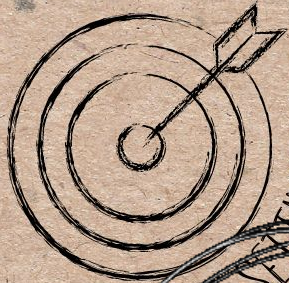
LET'S GET CURIOUS!



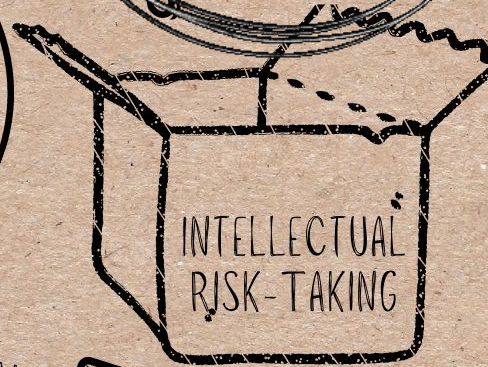
HABITS OF A SCHOLAR



CURIOSITY



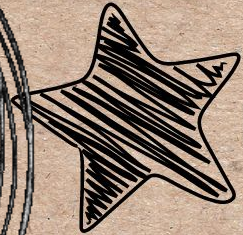
PREPARATION



GOAL SETTING

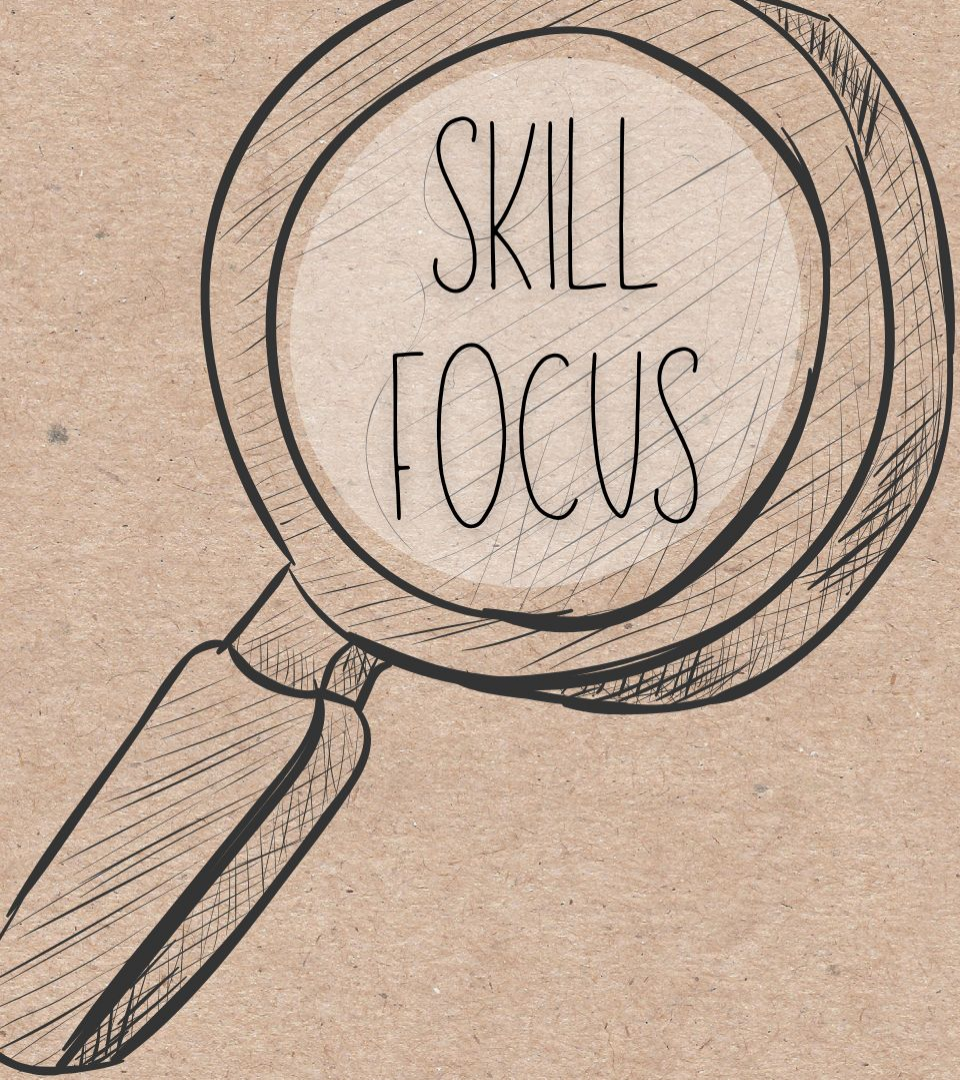


VARIED RESOURCES



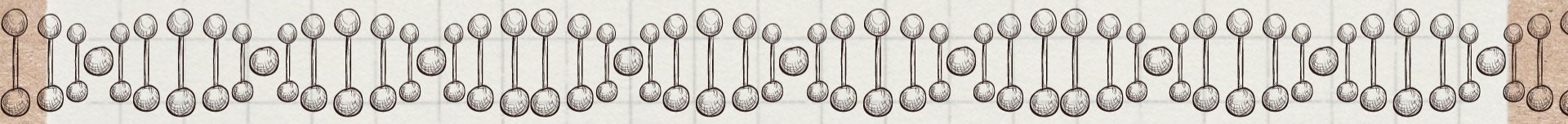
EXCELLENCE





Symbiosis

Analogies





Analogies Blooket

SYSTEMS HAVE PARTS THAT
WORK TO COMPLETE A
TASK.

SYSTEMS INTERACT.

PARTS OF
SYSTEMS ARE
INTERDEPENDENT
UPON ONE
ANOTHER AND
FORM SYMBIOTIC
RELATIONSHIPS.

SYSTEMS
FOLLOW
RULES.

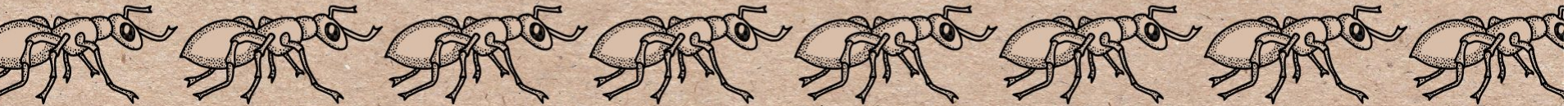
SYSTEMS 
GENERALIZATIONS

A SYSTEM MAY BE
INFLUENCED BY OTHER
SYSTEMS.

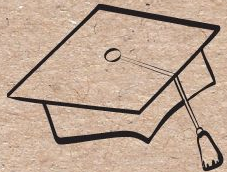
SYSTEMS ARE COMPOSED
OF SUBSYSTEMS.

Analogy Construction

1. Explore cards and look for relationships
2. Construct analogies.
3. Find connections among your analogies



HABITS OF A SCHOLAR

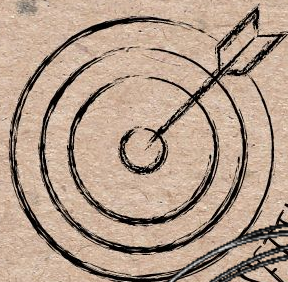


DIFFERENT PERSPECTIVES

CURIOSITY



PONDERING IDEAS



GOAL SETTING



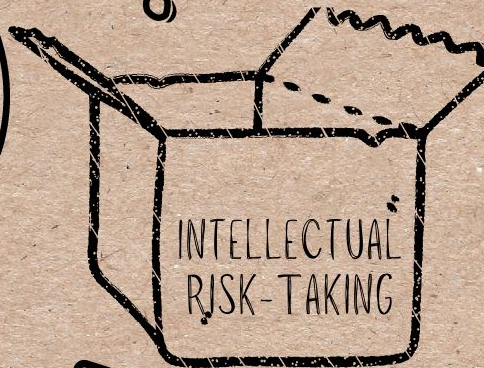
SAVING IDEAS



PREPARATION



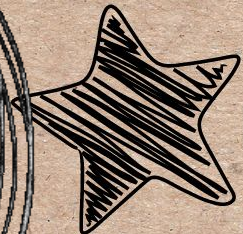
ACADEMIC HUMILITY



INTELLECTUAL RISK-TAKING



VARIED RESOURCES



EXCELLENCE



PERSEVERANCE



You've created
your own
analogies, now
you will identify
the relationships
found among the
pairs given.

Any unfamiliar
organisms will
require you to
research to
discover the
connection.



What relationship describes how each pair of organisms interacts?

Mutualism

+/+

Clownfish : anemone ::

Acacia trees : ants ::

Hippo : barbel fish ::

Capuchin monkeys : tree

What
relationship
describes how
each pair of
organisms
interacts?

Commensalism
+/0



Remora : sea turtles ::

Burdock : black bears ::

Poison dart frog : leafy plants ::

Arctic fox : reindeer

What relationship describes how each pair of organisms interacts?

Ammensalism
-/0

Bacteria : penicillin ::

Weeds : sunflowers ::

Ants : elephants ::

Insects : cattle



Sacculina barnacle : crabs ::

Cowbird : sparrows ::

Mosquito : humans ::

Wasp : caterpillars ::

What
relationship
describes how
each pair of
organisms
interacts?

Parasitism

+/-

What
relationship
describes how
each pair of
organisms
interacts?

Predation

+/-

Sea otter : octopus ::

Bald eagle : osprey ::

Arctic fox : lemmings ::

Alligators : turtles

What relationship describes how each pair of organisms interacts?

Competition

-/-



Sea sponge : coral ::

Coyote : rattlesnake ::

Woodpeckers : squirrels ::

Rubber tree : rubber tree

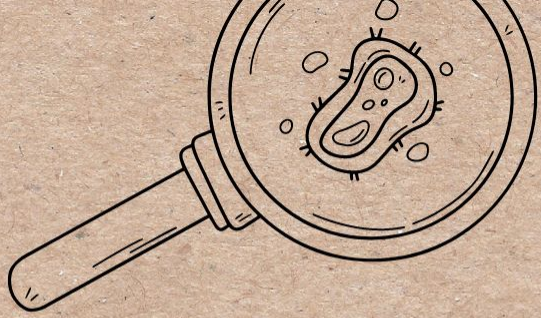
SYMBIOSIS

selfie!

You are part of
many different
symbiotic
relationships.

Create your own photo analogies to fit
into each of the 6 types of symbiotic
relationships with YOU as a part.





LET'S REFLECT...

Pick one of your Selfie Analogies and fully explain how they go together. What would happen if the connection disappeared? What impacts might it have?