

More Than Rereading

Creating Effective
Study Tools for
Learning & Memory

Session Outcomes

After this workshop, you will...

1. Create
several
study tools

2. Describe
how these
tools foster
learning

3. Identify the
study tools that
work best for you

Session Materials

Your materials:

- ◆ Blank sheets of paper
- ◆ Writing utensils

Course materials:

- ◆ Textbook
- ◆ Course Notes
- ◆ Course Lecture Slides

Website materials:

- ◆ Study Tools
Samples Handout
for reference



What can I invent?
How would I develop it?

CREATING

USE INFO TO CREATE
SOMETHING NEW



design, build,
plan, construct,
produce, devise, invent

EVALUATING

CRITICALLY EXAMINE INFO
& MAKE JUDGEMENTS



judge, critique, test
defend, criticize

ANALYZING

TAKE INFO APART &
EXPLORE RELATIONSHIPS



categorize, examine,
organize,
compare/contrast

Which is better?
Why is this better?



APPLYING

USE INFO IN A NEW (BUT SIMILAR) FORM

use, diagram, make a chart,
draw, apply, solve, calculate

How is this different
from or similar to...?

What happens
when...?

UNDERSTANDING

UNDERSTANDING & MAKING SENSE
OUT OF INFO



interpret, summarize, explain,
infer, paraphrase, discuss

How, why?

REMEMBERING

FIND OR REMEMBER INFO



list, find, name, identify,
locate, describe,
memorize, define

Who, what, when?

Deep Learning


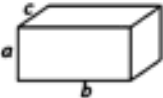
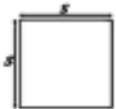
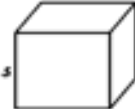
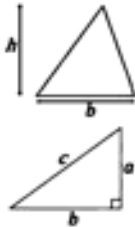



But, how?



Matrix

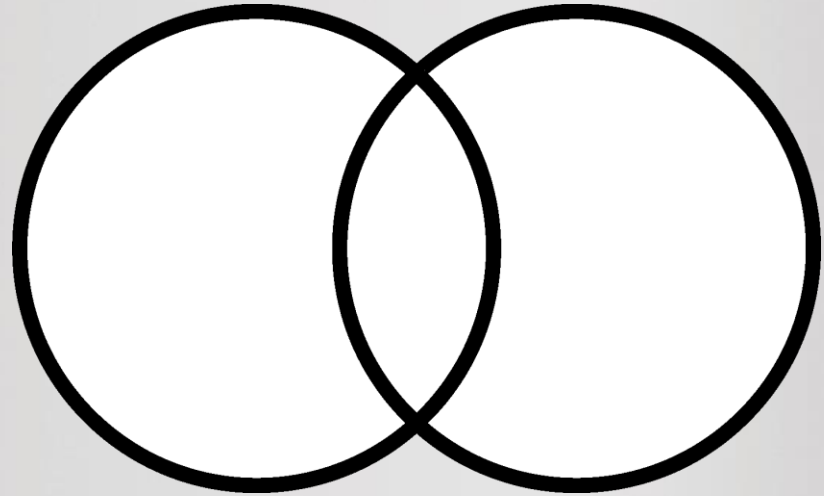
A matrix is used when the same types of information are provided in the notes or text for a set of topics. A matrix helps organize information by showing its relationship to similar categories of information. It is a helpful tool for comparing and contrasting information.

term	book definition	in my own words	example from lecture	new example

Shape	Perimeter	Area	Shape	Volume
Rectangle 	$2a + 2b$	ab	Rectangular solid 	abc
Square 	$4s$	s^2	Cube 	s^3
Triangle 	$a + b + c$	$\frac{1}{2}bh$	Right circular cone 	$\frac{1}{3}\pi r^2 h$
Circle 	$2\pi r$	πr^2	sphere 	$\frac{4}{3}\pi r^3$

Venn Diagram

A Venn Diagram can be used to compare the similarities and differences between two concepts, systems, or theories. Draw two overlapping circles with each circle labeled as one of the two concepts. Write the similarities in the overlapping portion and then the differences in the outer portion of the circles. This is a good visual technique for reviewing similar yet contrasting concepts.



mixtures

consists of 2+
elements and/or
compounds that are
physically intermingled

not a substance

components can vary
in their parts by mass

**retains many properties
of its components**

can be separated by
physical changes

compounds

consists of 2+
different elements
that are bonded
chemically

may or may not
consist of molecules

**elements are present in
fixed parts by mass**

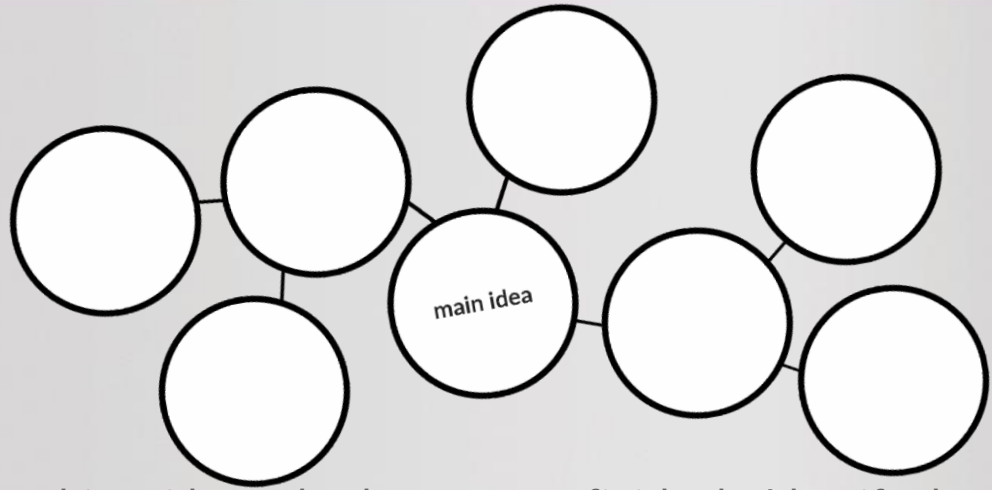
properties are different
from its components

can be broken down
into its component
elements

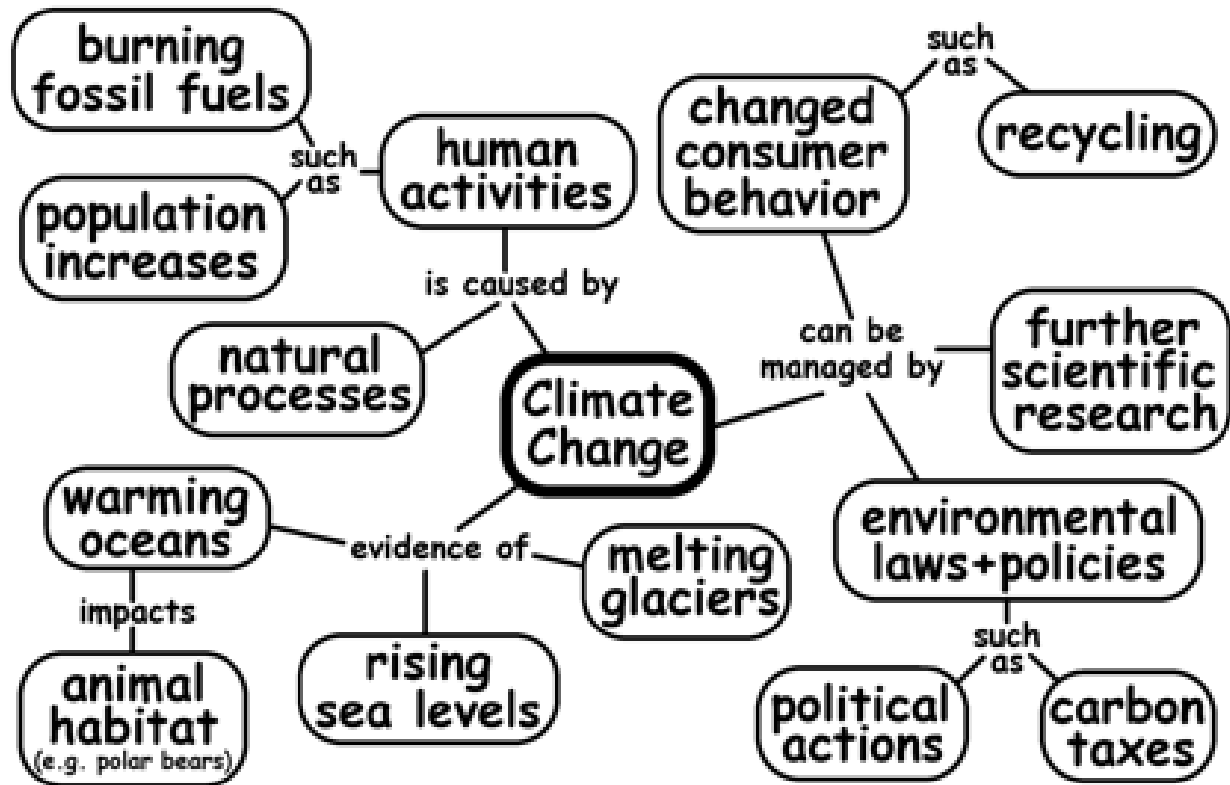
contains
elements



Concept Mapping



This strategy will look like a big spider web when you are finished. Identify the central word, concept, or question around which to build the map. Start with a circle in the middle and include the main idea within. Extend branches out from the central circle that include all the subtopics from the main idea. Continue to add additional branches with related topics and circle groups of branches that are linked. This mapping encourages you to see the overall picture and helps bring focus away from minute details and back to the main ideas.



Concept Cards

On the front of the card, write the term, phrase, or concept that you are studying. On the back of the card, include *at least two* of the following:

- book definition
- notes/lecture definition
- a definition in your own words
- summary of the concept or process
- a picture or diagram
- important characteristics
- examples or applications
- expectations or caution

term or concept

front

- a definition that makes sense to you
- formulas needed
- a diagram or example
- other important/useful information

back

Cerebellum

Functions

- regulates voluntary movements
 - posture
 - balance
 - coordination
 - speech
 - vision

Receives info from...

- sensory systems
- spinal cord
- other parts of brain

Symptoms of a disorder...

- lack of muscle control/coordination
- difficulties walking/mobility
- slurred speech & difficulty breathing
- abnormal eye movements
- headaches



cerebellum





Incomplete Outline

The incomplete outline can help you recognize the main points and the organizational pattern of information in order to prepare for an upcoming lecture. Determining the major points can help to sort out information and locate the ideas being communicated, making connections easier to find and understand, helping you figure out what's important.

Chapter 7.1 Protozoans

I. What are protozoans?

-
-
-

II. Structure and function of protozoans

-
-
-
-

Group Study

Group study has many benefits!

- Fights procrastination
- Gives a break from studying alone
- Serves as accountability partner(s)
- Fills in gaps in understanding and in note-taking
- Provides a new perspective on the material
- Gets you talking about the material, which enhances understanding and identifies gaps in understanding
- Offers opportunities to practice test



How do I find my group?

- Supplemental Instruction (SI)
- Tutoring
- Email all students in the Blackboard course
- Talk to a neighbor in lecture
- Talk to the professor to see if anyone else has expressed interest in a study group

Matrix

Venn Diagram

Concept Map

Concept Card

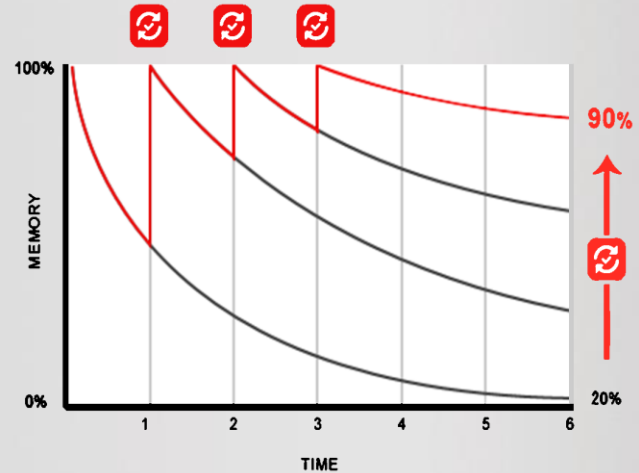
Initial Reactions



"Successive Relearning"




Self-Testing



Spaced Study
(Repeat)

Take Action!



Starting today, what is
one thing you will start
doing to improve
how you study?





www.kent.edu/asc

Academic Success Center (ASC)
Center for Undergraduate
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Additional Resources

- Academic Success Plan
- Academic Coaching
- Learning Skills Videos
- Tutoring (Scheduled, Drop-in)
- Supplemental Instruction (SI)