

The Use of Mind Maps in the Classroom

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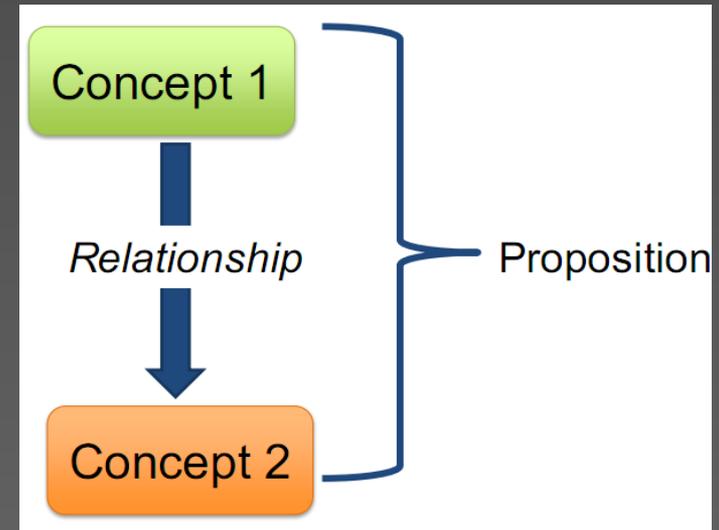
Workshop Outcomes:

Today you will learn:

- how to activate learning with the use of mind-maps;
- how to make quick quantitative assessment of mind-maps;
- how to organize lectures with the use of mind-maps.

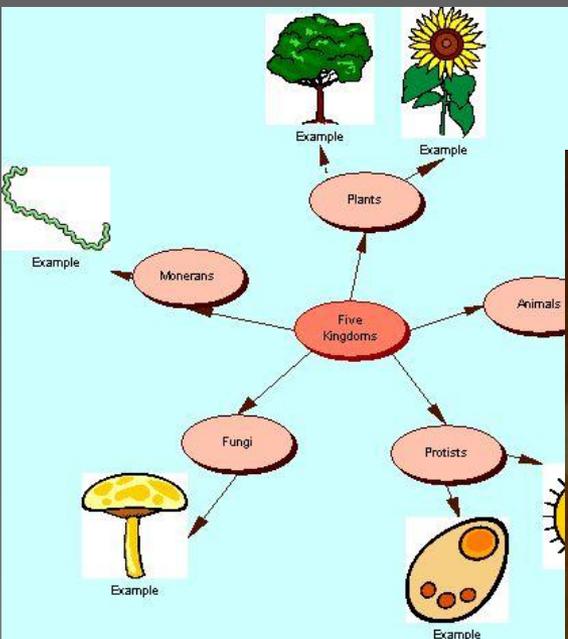
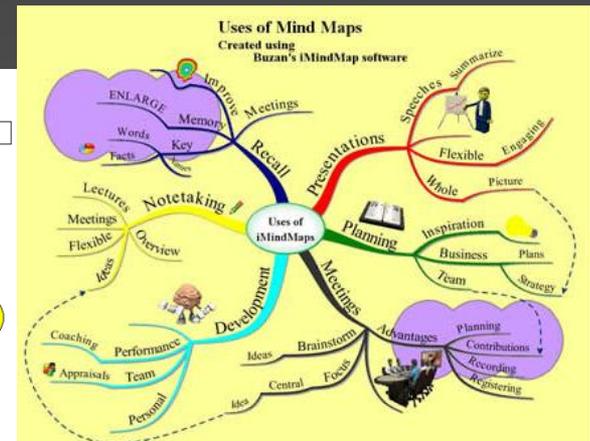
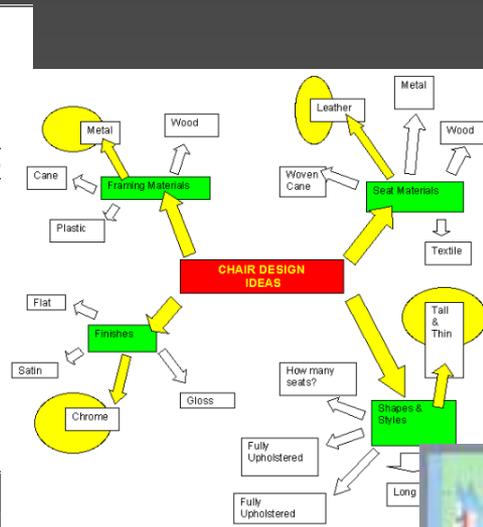
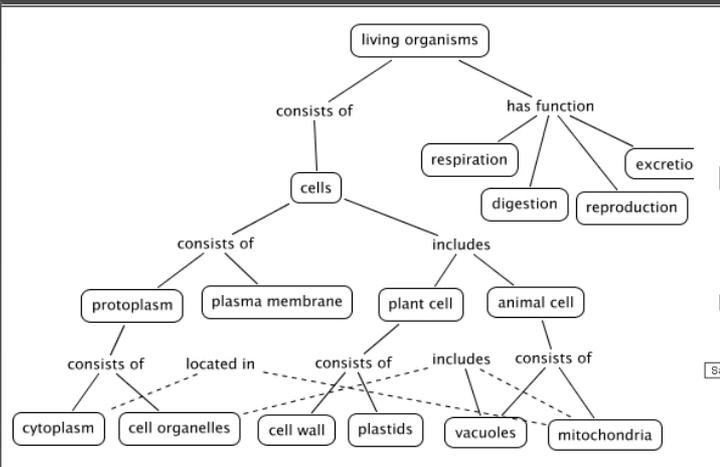
Definition:

- A mind-map presents the relationships among a set of connected concepts and ideas.
- It is a pictorial way to display how an individual, or group, perceives a concept, problem, or topic.



Historical background

- The technique of concept-mapping was developed in the Seventies by Joseph Novak (Cornell University) as a means of representing the emerging science knowledge of students.
- It has subsequently been used as a tool to increase meaningful learning in the sciences and other subjects as well as to represent the expert knowledge of individuals and teams in education, government and business.
- Concept maps have their origin in the learning movement called constructivism. In particular, constructivists hold that learners actively construct knowledge interacting with the environment.



Learning:

- Mind mapping has the potential to transform abstract knowledge into concrete visual representation, often highlighting aspects of a process or complex concept.
- Ideally students provide feedback on each other's concept maps to ensure accuracy.

With a partner, take about 5 minutes to consider the following list of items and draw a map.

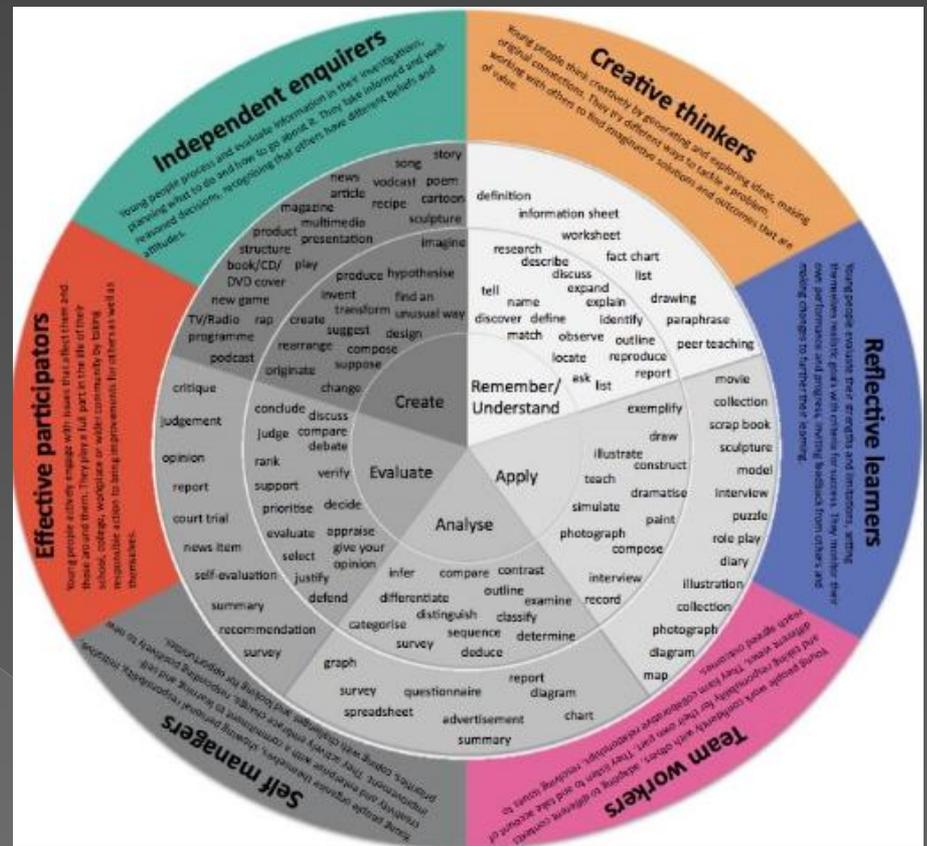
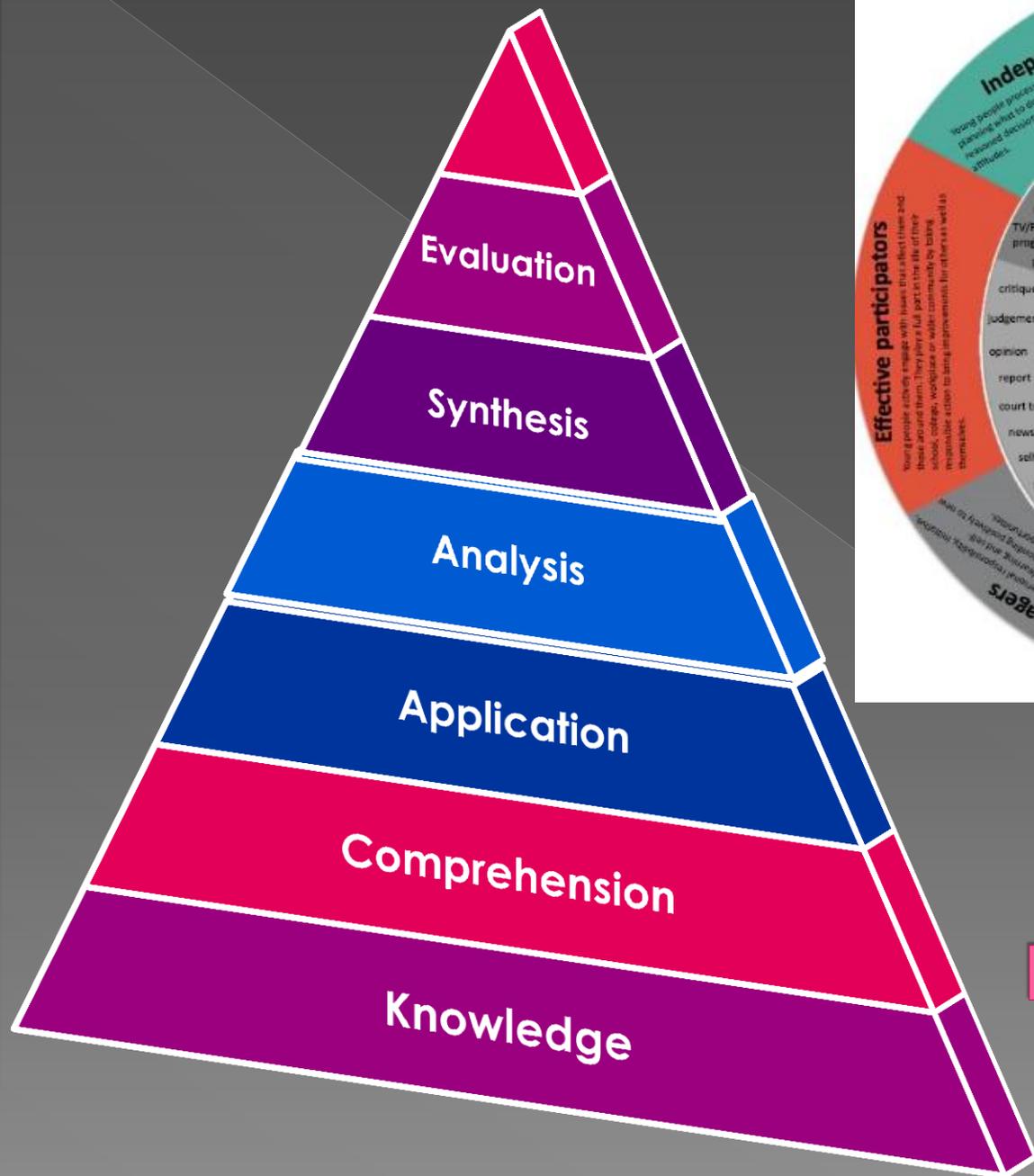
How would you map the relationship between these concepts?

Note that the emphasis is on establishing the relationship between ideas.

You can add a few words to show a connection, if needed.

Items (not listed in any particular order):

- > learning,
- > knowledge,
- > activity,
- > listening,
- > discussion

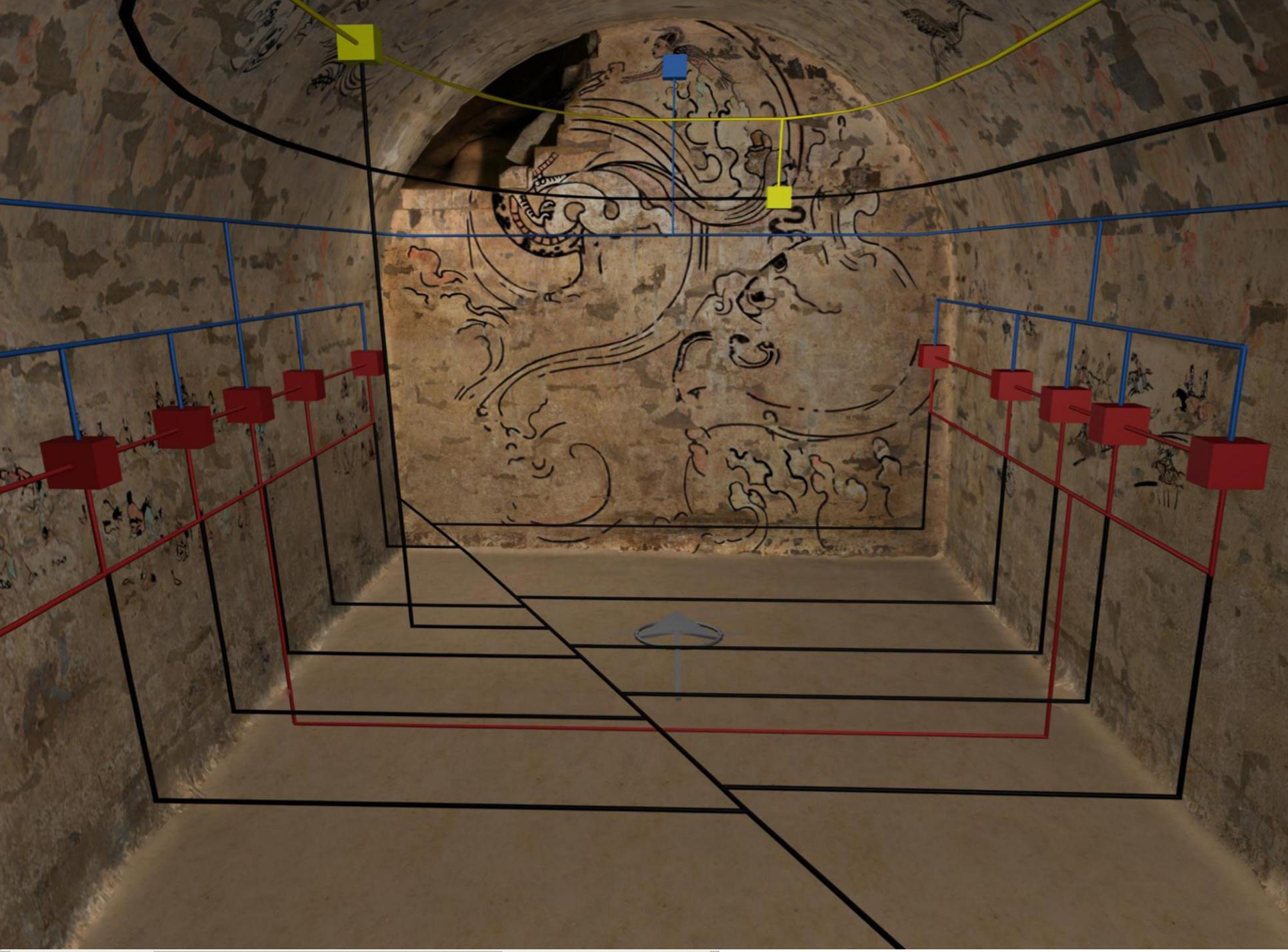


Bloom's taxonomy

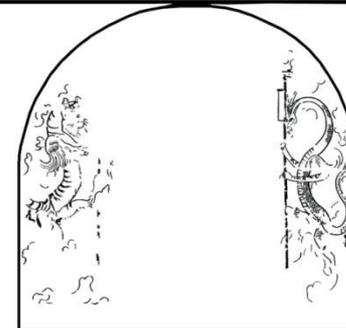
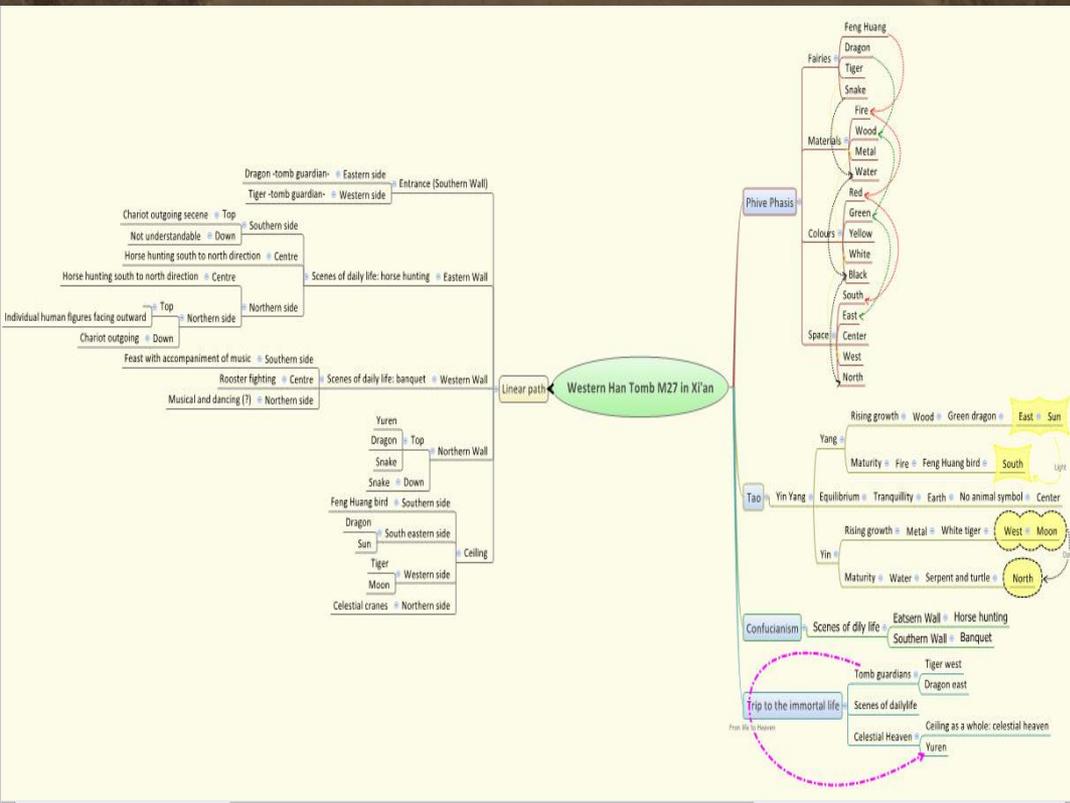
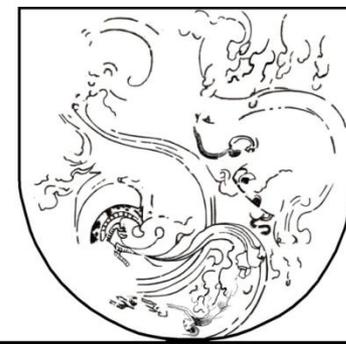
What kind of in class or at home activities could you ask your students to perform using mind-maps?

- ◉ In class: assign short reading and ask students to do a mind-map (or if you've presented an overview, ask them to concept map the overview)
- ◉ At home use mindmeister as homework (either as a group or individually)

<http://www.mindmeister.com/maps/show/17433840>



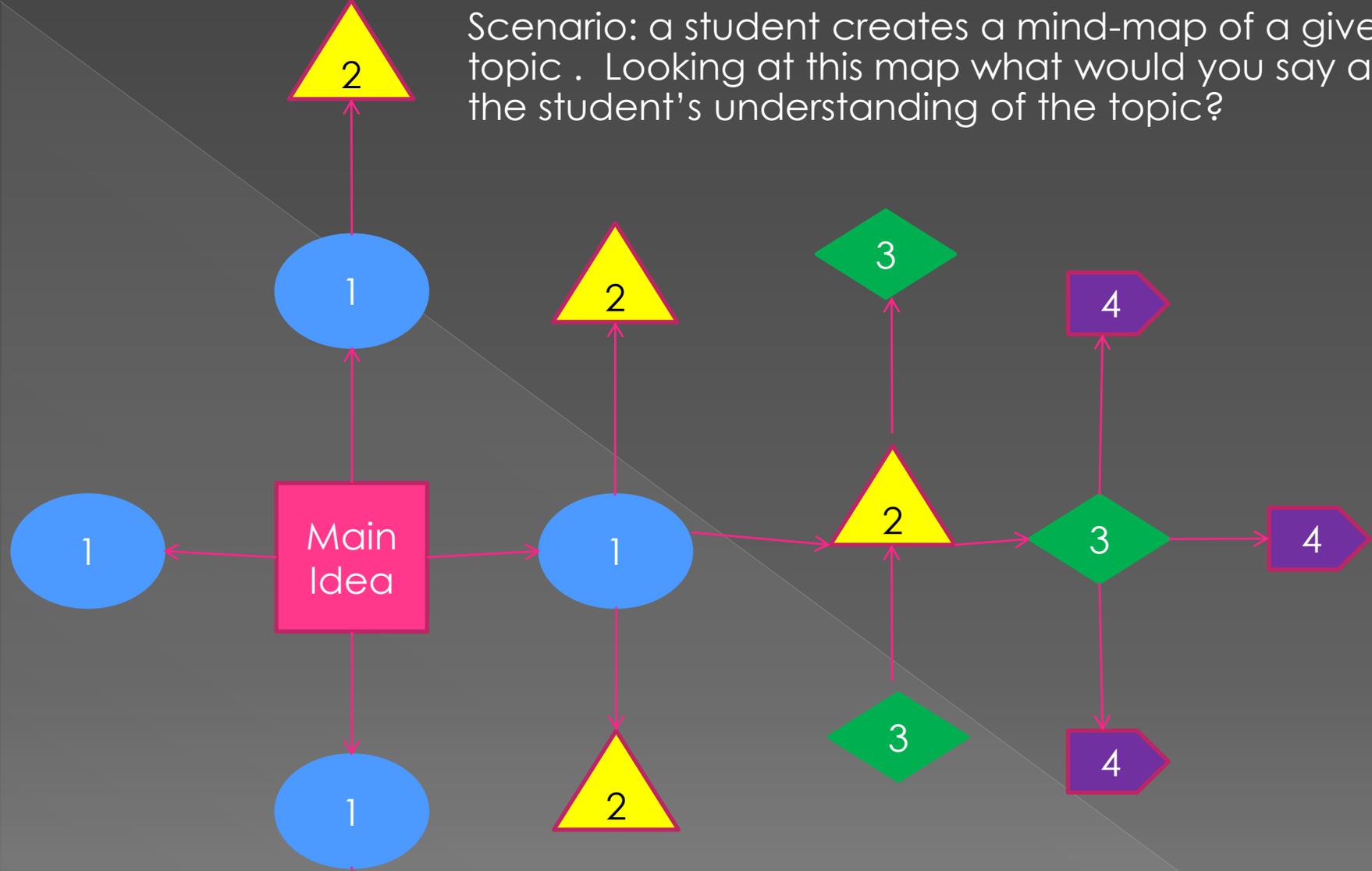
TOMB M27 MATRIX/MIND MAP



Assessing:

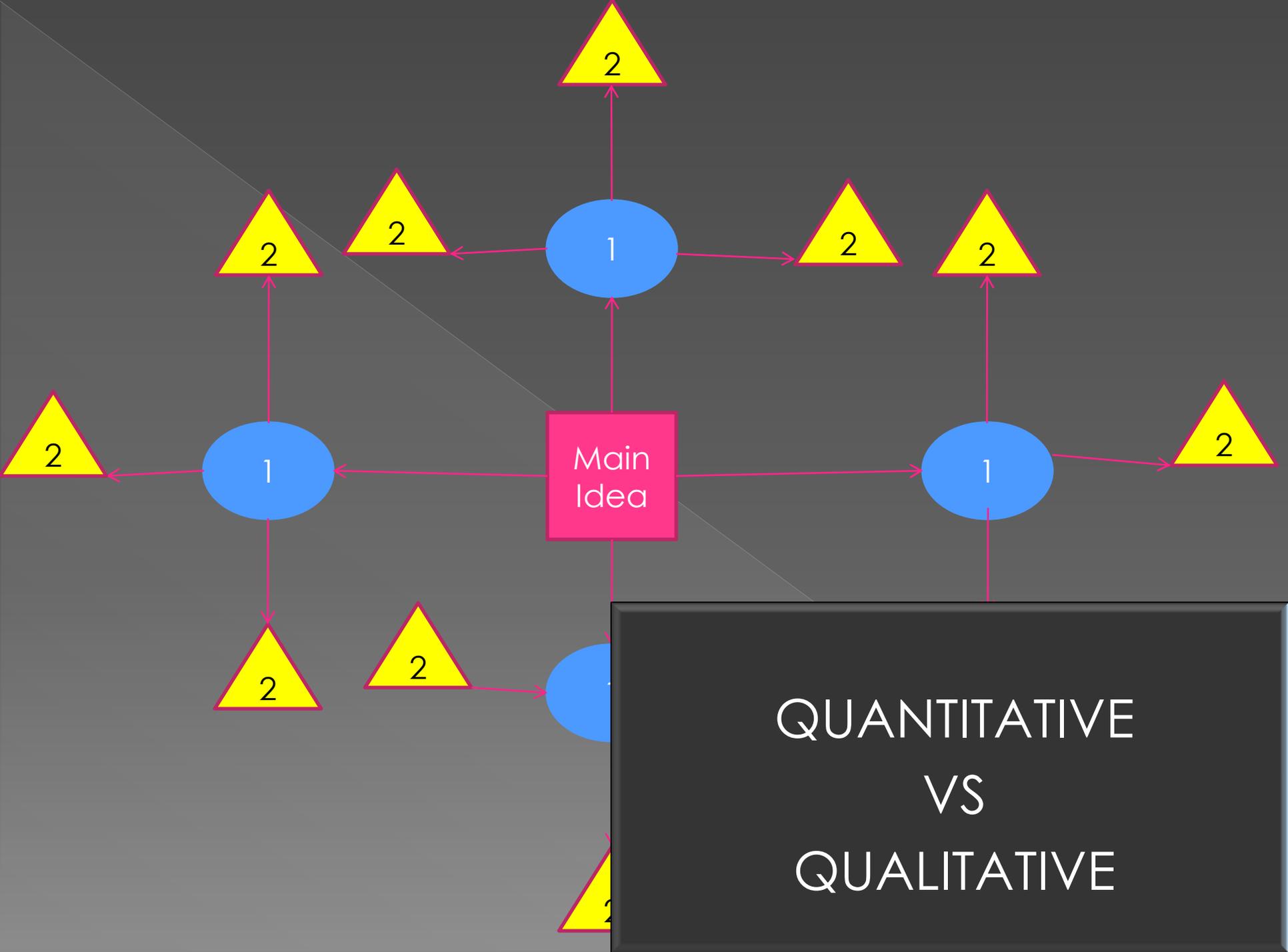
- The mind-map can demonstrate both depth and breadth of understanding of a topic.

Scenario: a student creates a mind-map of a given topic . Looking at this map what would you say about the student's understanding of the topic?



The model demonstrates a situation where the student has more fully developed one aspect of an idea, and has not developed or demonstrated understanding or learning in the other three links.

In order to demonstrate learning, the perception exists that a map should include multiple levels of entries for all of the Level 1 entries.



Main Idea

2

1

1

1

2

2

2

2

2

2

2

2

2

QUANTITATIVE
VS
QUALITATIVE

Assessment:

- Assessing Reading:

Asking students to summarize an article using mind-maps will allow to understand their reading comprehension.

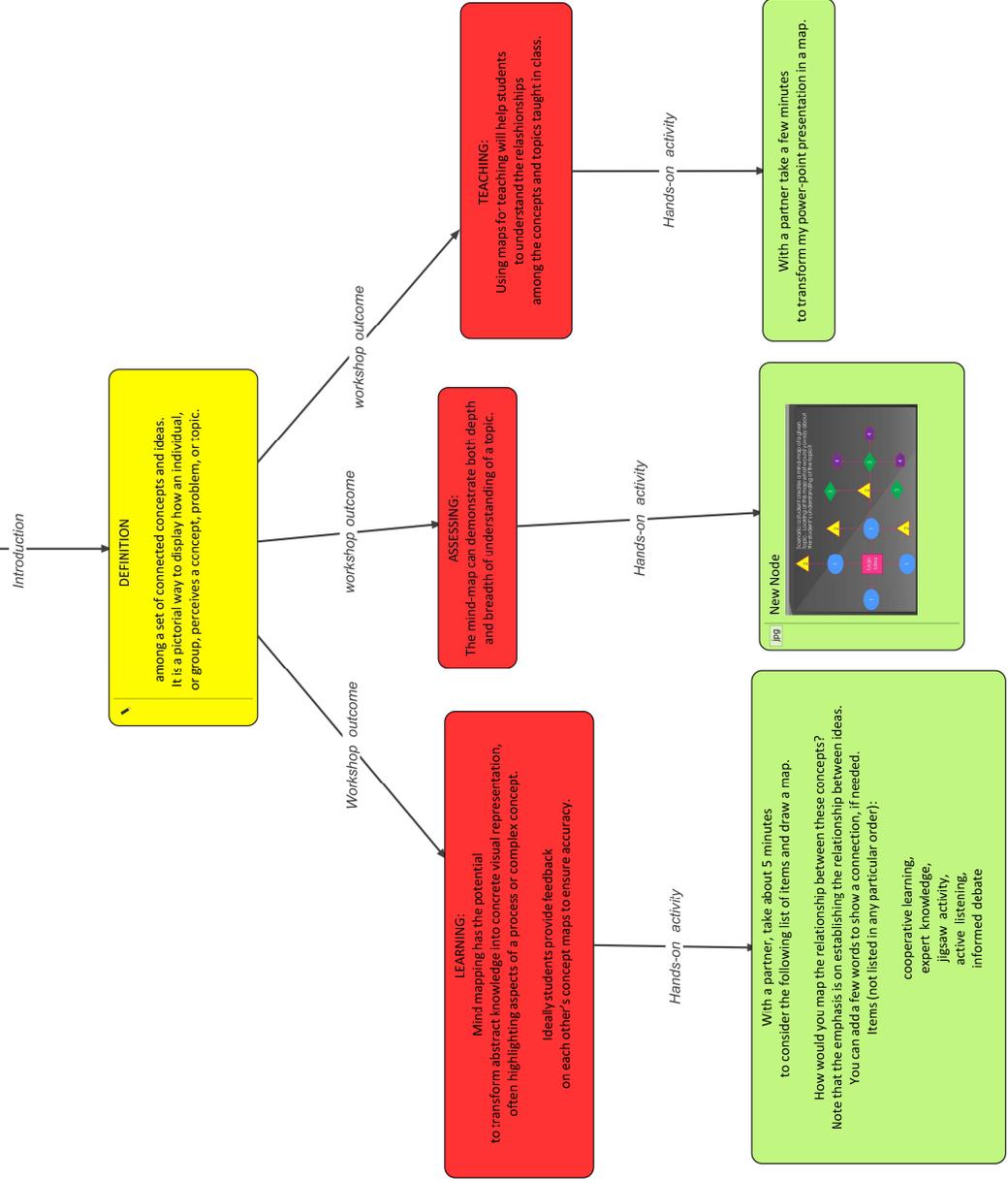
- Assessing Writing:

Asking students to create a mind-map with the outline of a thesis/essay will allow to help them shape their arguments.

Teaching:

- ◉ With a partner take a few minutes to transform my power-point presentation in a map.

The Use of Mind Maps in the Classroom



- Using maps for teaching will help students to understand the relationships among the concepts and topics taught in class.

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