Visualizing Understanding

with

Concept Maps

presented by

written by

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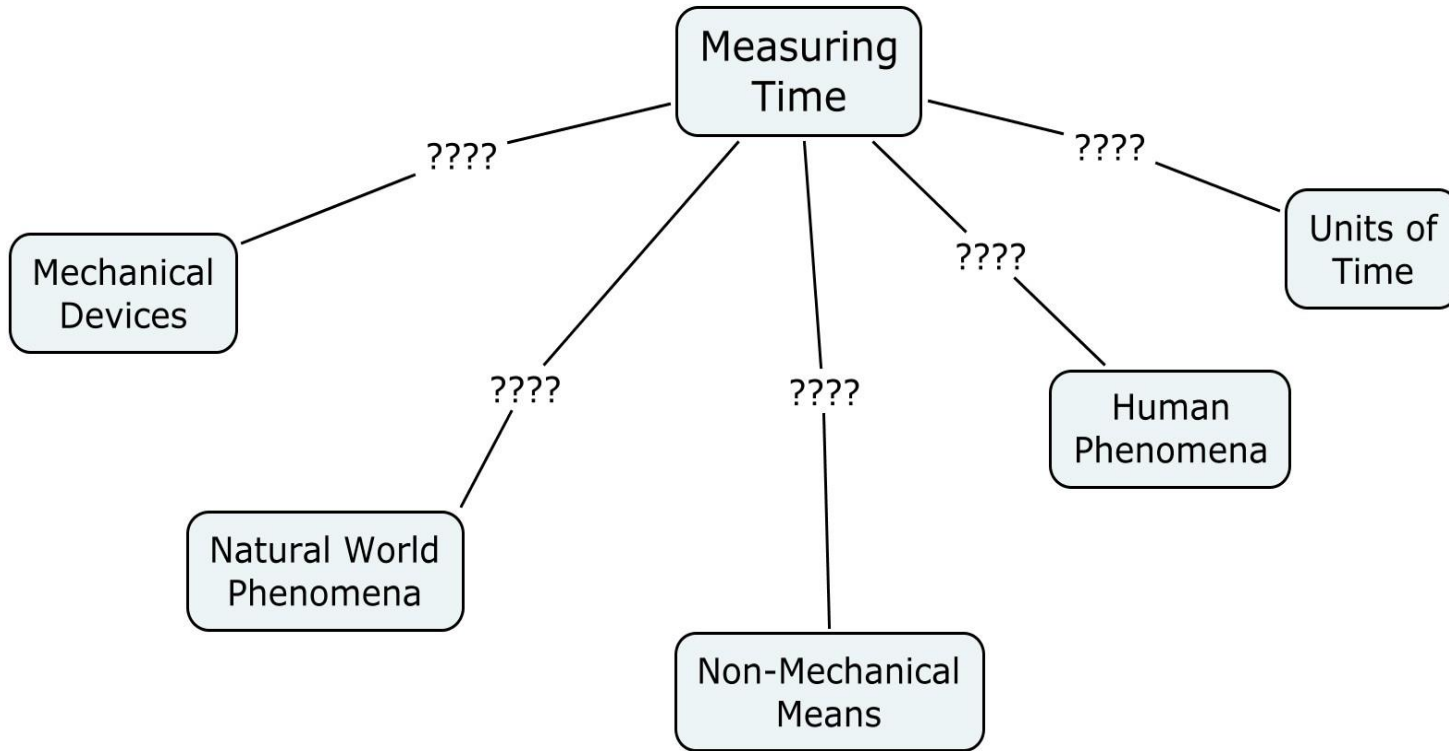
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spee

What is a Concept Map?

- Visual Representation of Cognitive

  Knowledge Structures (schemata)

- Scaffolds/Templates to Build Understanding

- Creating a Concept Map

  – Generating Concepts

  – Organizing Concepts (hierarchically, sequentially, etc.)

  – Linking Concepts with Relationships

Measuring Time

- Mechanical Devices — ???? — Measuring Time
- Measuring Time — ???? — Natural World Phenomena
- Measuring Time — ???? — Non-Mechanical Means
- Measuring Time — ???? — Human Phenomena
- Measuring Time — ???? — Units of Time

Possible relationships:
- is an example of
- leads to
- is a result of
- include
- can be measured with
- are manifested as
- are greater than
- create

Concepts
- sun
- minutes
- shadows
- moon
- hourglass
- walking
- wrinkles
- seasons
- singing
- clock
- hours
- tides
- gray hair
- sundial

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Concept Maps for Higher Order Thinking

- Analysis and Synthesis

- Facilitating Metacognition

- Emphasis on Relationships Among Ideas

- Improved Retention

- Rapid Retrieval

FEUP Project

- Connecting Theory and Practice

- Preliminary Results

  – Improved Performance

  – Positive Student Attitude

  – Self-reported Learning Improvement

  – Positive Instructor Observations

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