



Science IDEAS Activity Checklist



PRIOR KNOWLEDGE

- ___ Teacher questions students regarding their understanding of what they have learned previously.



SCIENCE ACTIVITIES

Teacher Demonstrations of Experiments

- ___ Students attend to demonstration
- ___ Students describe/review/interpret what they observed
- ___ Students identify relationships of demonstration to prior instruction

Student Hands-On Activities

- ___ Classroom organization structures the activities of students and groups
- ___ All students have clearly defined roles
- ___ Student groups are monitored by the teacher
- ___ Students describe/review/interpret what they observed
- ___ Students identify relationships of demonstration to prior instruction



PROPOSITIONAL CONCEPT MAPPING

- ___ Teacher selects a topic for concept mapping (prior knowledge, cumulative learning experience, reading material)
- ___ Teacher solicits student suggestions of major concepts and subconcepts and writes each on post-it notes
- ___ Teacher uses prior knowledge routine as necessary and is accepting of all student suggestions (by writing suggestion on post-it note)
- ___ Teacher obtains student agreement for general organizing concept and locates post-it on top of concept map
- ___ Teacher repeatedly solicits student suggestions for subtopics, guides consensus, and arranges post-it notes to form hierarchical concept map
- ___ Teacher repeatedly solicits student suggestions for links between concepts (to form sentences), guides consensus, and writes links on concept map
- ___ Teacher has several students "read" through concept map
- ___ Teacher guides editorial changes to concept map, as necessary



READING COMPREHENSION ACTIVITIES

- ___ Different students read (re-read) text aloud for fluency and meaning
- ___ Students are oriented toward questions that reading and understanding the material will answer
- ___ Teacher guides student reading on a sentence-by-sentence, paragraph-by-paragraph basis while focusing, discussing, and connecting concepts
- ___ Students identify relationships of material read prior to instruction (e.g., demonstrations, hands-on, other reading)



APPLICATION ACTIVITIES

- ___ Students or groups of students learn more about what they are learning by participating in various activities (e.g., projects, reports, reading activities, internet searches) that extend curricular knowledge gained



WRITING ACTIVITIES

Student Journaling

- ___ Students complete journals as regular review/summary activity
- After completion of activity or series of activities, students
 - ___ Describe what they have experienced
 - ___ Identify the knowledge they have gained
 - ___ Identify and use concepts to relate different prior activities

Writing

- ___ Student writing topic reflects a science topic and/or science learning experiences
- ___ Student writing activity consists of at least 3-5 paragraphs
- ___ Student writing passages demonstrate focus, organization, detail, and elaboration
- ___ Teacher develops and uses FCAT writing prompts related to science content taught
- ___ Students are guided to edit their written passages re: grammar, FCAT rubrics
- Optional:* Students construct or use propositional concept map as organizational framework for writing

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