

Grade 1 Science

Lesson: 4-11

Unit: Materials, Objects and Everyday Structures

Topic: Properties of Structures

Lesson

- Review video from last class - "What do architects consider when making a building?"
 - looks, purpose, weather, etc
- "What is the purpose of a building?"
 - shelter
- Explain today's task
 - Label purpose of structure
 - Given criteria, design a building to suit the purpose
- Hand out worksheet
- Read criteria with students
- Students work
- When done, students are to explain building to me.
- Add colour/detail when done.

Reminders

Supplies Needed

- Worksheets

Homework

Notes

Grade 1 Science

Lesson: 4-12

Unit: Materials, Objects and Everyday Structures

Topic: Quiz / Finish-up

Lesson

- Review Quiz expectations
 - No talking
 - Eyes on own paper
 - Hand up if question or need help
- Hand out quizzes
- Read through with students
- When done students may get their folder to do finish-up work

Reminders

Supplies Needed

Quizzes

Homework

Notes

Grade 1 Science

Lesson: 4-13

Unit: Materials, Objects and Everyday Structures

Topic: Fasteners

Lesson

- Have students start working on the front of the worksheet after a brief explanation
- While students work, call on individuals to guide a conference about their quiz
- When students start to finish up front of worksheet, explain read and explain back
- Talk about how velcro works → "Have you felt like it is ripping?" - hooks caught in loops
→ "Why is velcro not as good after many uses?" - loops rip, hooks unbind
- students work on their list of fasteners

Reminders

Supplies Needed

- Worksheets
- Quizzes

Homework

Notes

Grade 1 Science

Lesson: 4-14

Unit: Materials, Objects and Everyday Structures

Topic: Build - Explain/Plan

Lesson

Review → Object, Material, Structure

→ "Why do we have different materials?" - They have different properties

→ Process an architect takes to make a building - requirements, design, model, build

Explain this week's task → given a requirement, design a structure to fit, then build the structure. ~~the~~ Next, test the structure to see if it worked, Finally, ~~answer~~ document the build.

- Discuss requirement of design → Need to build a shelter that will keep the toys dry from the "rain", but the toys are not allowed to touch the shelter at all.
- Show toys and spray bottle that will represent rain. * List available supplies
- Tell students that today will be used to design their structure
- Show and explain worksheet → do front only
- Hand out worksheet
- Students come to discuss plan if finished.

Reminders

- Prep supplies for next class

Supplies Needed

- Toys (toy car + figure)
- Spray Bottle
- Worksheet
- List of supplies

Homework

Notes

- Only need one set of toys today, but use multiple sets for testing

Bill Karabo
to keep
for

Grade 1 Science

Lesson: 4-15

Unit: Materials, Objects and Everyday Structures

Topic: Build - Build / Test

Lesson

- Review task as explained last class
- Lay out supplies
- Explain that students must finish design before they may begin build
- Students use today's period to build their shelter
- IF students finish they may do a practise trial; then work further on their structure
- At the end of class all structures should be labelled and put in a safe place.
- Discuss starting with the structural parts - build a frame first
* show example?

Reminders

* start oral conferencing as soon as possible

Supplies Needed

- | | | | | |
|-------------------|----------------|----------------|------------|-----------------|
| - Popsicle sticks | - Elastics | - Newspaper | - Felt? | - spray bottle |
| - Straws | - Glue | - Paper Towel | - Toys | - Aluminum Foil |
| - Tape | - Plastic Wrap | - Towel Pieces | - Play Doh | |

Homework

Notes

Need 100 minute block

Grade 1 Science

Lesson: 4-16

Unit: Materials, Objects and Everyday Structures

Topic: Build - Test / Questions

Lesson

- Allow students a few minutes to finish their anything incomplete on their shelter.
- Gather students around and test their structures,
→ one sets up while other is squirted
- When done, students may watch others, or may start on their questions about their design

Reminders

* continue oral conferencing

Supplies Needed

- Toys
- Towels to clean up after testing.
- Spray bottle

Homework

Notes

Grade 1 Science

Lesson: 4-17

Unit: Materials, Objects and Everyday Structures

Topic: Natural vs Man-Made

Lesson

- Sit on carpet with students
- Show them bucket of objects
- One object at a time, remove from bucket ask - "What is it?"
- "What can you tell me about it?"
- Ask students to sort objects into two piles (choose a volunteer to take input from class to do it).
- ~~Re-sort~~ Discuss piles → Ask for names of two groups
- Re-sort it not Natural vs Man-Made
- ~~Ask what~~ Discuss concept of Natural → found in nature, would be there without people
Man-Made → made by people
- Show and explain worksheet
- students do worksheet.

Reminders

* as students work continue build oral confereers.

Supplies Needed

- Variety of Natural Objects (Rock, Stick, Leaf, Plant, Acorn, Pinecone etc)
- Variety of Man-Made Objects (Ball, Block, Al Foil, Straw, Elastic etc)
- Worksheets

Homework

Notes

Grade 1 Science

Lesson: 4-18

Unit: Materials, Objects and Everyday Structures

Topic: Where Do Materials Come From

Lesson

- "Last class we learned that materials and objects can be sorted as Natural or Man-Made"
- Review Natural and Man-Made
 - what does — mean
 - Name examples.
- "What material is this?" (Point at something made of wood).
 - is the object natural or man-made? — man-made
 - is ^{the} wood used natural or man-made? — man-made
 - where does the wood come from? → trees
 - are trees natural or man-made? → Natural
- Discuss the fact that everything, like the wooden object, can be traced back to something natural.
- ~~Divide class into groups and give groups an object~~ * Do as class
- ~~Each group is to explain what the object is, what it is made from and where that material comes from~~
- ~~Give groups time then they present what they think~~ — read multiple times
- Hand out worksheet → Read paragraph, students fill in missing words

Reminders

Supplies Needed

- Objects → something paper, a brick, something rubber something plastic, something cotton, something made of wood
- Worksheets — Answer key

Homework

Notes

Grade 1 Science

Lesson: 4-19

Unit: Materials, Objects and Everyday Structures

Topic: Similarities / Differences

Lesson

- Show class two pairs of safety goggles → "What are these?"
 - "What materials are they made from?"
 - "What are they used for?"
 - "How are they the same?"
 - "How are they different?"
- * Go into a lot of detail → "Where do the materials come from?"
- Put questions up for students to see → read each question (same as above)
- Explain task to students → in pairs, choose two similar objects, discuss to get answers for all 6 questions, be ready to tell class your findings
- Students get ~10 minutes to choose objects and discuss
- Bring students to carpet
- Have groups present info, one pair at a time

Reminders

Supplies Needed

- My safety goggles
- School safety goggles
- Questions

Homework

Notes

Grade 1 Science

Lesson: 4-20

Unit: Materials, Objects and Everyday Structures

Topic: Work Period

Lesson

- Review the following concepts
 - Natural vs Man Made
 - Materials have Natural Origins
 - Objects can have similarities and differences
- Inform students that today is a period that is to be used to finish their work on "Natural vs Man Made" and "Where do ~~Objects~~^{Materials} Come From"
- If done those, students should try to finish up older work.
- If all work is done, students may do finish-up work for home room teacher, or may read quietly.

Reminders

Supplies Needed

Homework

Notes

* Move to 4-19?