

Grade 2 Science

Lesson: 4-1

Unit: Movement

Topic: Intro

Lesson

- Brainstorm
 - what is movement (change in position)
 - ways things move (turn, swing, bounce, vibrate, roll etc)
- Students make a title page for the unit

Reminders

Supplies Needed

- Plain paper

Homework

Notes

Grade 2 Science

Lesson: 4-2

Unit: Movement

Topic: Position

Lesson

- Review → What is movement?
- Brainstorm → What does position mean?
 - As a class write a list of position words
ex above, behind, in etc
- Have students stand by their chair with a pencil in their ~~hand~~ hand.
 - ~~Simon says~~ Play "simon says" using position words
 - example: Simon says stand behind your chair
Simon says put your pencil under the chair etc
- Hand out work sheet
- Students have the remainder of class to work

Reminders

Supplies Needed

- Worksheets

Homework

Notes

Grade 2 Science

Lesson: 4-3

Unit: Movement

Topic: Moving Objects

Lesson

- Take kids out to park to look at equipment
 - "Is anything moving now?"
 - "What could you do to make things move?"
 - Look specifically at swings
 - "What parts stays still?" > choose well behaved student to demonstrate
 - "What parts move?"
 - "What happens if you stop pumping your legs?"
 - Allow kids to play on park for 10 minutes looking for types of movement
 - ~~ways to~~ movement / ways to move
 - Call them over to the slide
 - "What happens when you sit on slide?"
 - "What if slide were flat?"
- Take students back to class
- Hand out work sheet

Reminders

Supplies Needed

- Work sheets
- Questions sheet

Homework

Notes

Grade 2 Science

Lesson: 4-4

Unit: Movement

Topic: Bouncing (1 of 4)

Lesson

- Show golf ball, tennis ball and sponge ball to students
 - "How are they the same?"
 - "How are they different?"
 - "How do balls move?"
 - "Will they all bounce the same?"
- Explain experiment
 - bounce 3 different balls to compare bounce height
 - First predict, then experiment
 - work in pairs
 - Tape meterstick to wall
 - Drop ball from 100 cm, record bounce height
- Hand out worksheet
 - have students predict which ball will bounce highest/lowest
- ~~perform experiment (part 1)~~ Practise dropping balls - show technique

* No throwing

* talk about importance of constant drop height

Reminders

Supplies Needed

- | | | |
|----------------|----------------|--------------|
| - Golf balls | - Sponge Balls | - Tape |
| - Tennis balls | - Metersticks | - Worksheets |

Homework

Notes

Day 2 → experiment #1
→ write experiment into as class

Purpose - to compare how high the three different balls bounce

Equipment - tape, meterstick, tennis ball, golf ball, sponge ball

Procedure - 1) tape meterstick to wall
2) Drop ball from 100 cm
3) Measure bounce height
4) repeat with each ball

Discussion - I thought the tennis ball would bounce the highest, but the golf ball did. I learned that golf balls are really bouncy.

Grade 2 Science

Lesson: 4-6

Unit: Movement

Topic: Bouncing (3 of ⁴ ~~5~~)

Lesson

- Talk about experiment from last class
 - results
 - what else was constant → bounce surface
- Explain Today's experiment
 - drop golf ball on 3 different surfaces
 - First predict, then test
 - Work in pairs
 - Tape meter stick to wall
 - Drop on floor, gym mat, cardboard from 100 cm
- Hand worksheets back to students
- Students perform experiment
- students begin worksheet. (use experiment #1 as example)

Reminders

- * Find average data for next class

Supplies Needed

- Golf balls
- Meter Sticks
- Cardboard
- Tape
- Gym Mats
- worksheets

Homework

Notes

- * Need an extra period for students to do worksheet
 - start by reviewing each section
 - students use experiment #1 as an example

↑ Do after graph

Grade 2 Science

Lesson: 4-7

Unit: Movement

Topic: Bouncing

4 4
4 4

Lesson

- Review what has been done so far
- Hand back worksheets (if marked)
- Plot data with students
 - discuss scientists represent data with graphs
 - discuss parts of graph as drawn
- ~~Discuss remaining sections of worksheets (prepare, present etc.)~~
- ~~Students use remaining time to finish worksheets.~~
- ~~Students make their own graphs.~~
- students continue working on experiment #2 worksheet
- Hand out quiz Note

Reminders

Supplies Needed

- large chart paper (synonyms)
- Worksheets
- Markers
- data

~~graph paper~~
Quiz Note

Homework

Notes

Grade 2 Science

Lesson: 4-8

Unit: Movement

Topic: Discover Movement

Lesson

Before Class

- Prepare multiple baskets with a variety of objects (see below)

During Class

- Give each group a basket with objects
 - Give each individual a block and a piece of paper
 - ~~Ask~~ Have students examine objects
 - Ask "Is block moving now?", "How could you make it move?", "Can you use objects in basket to make it move?"
 - Have students experiment with objects to see how they can move block across paper (pull with string, roll over pencils, etc)
 - students may combine objects to move block
 - Make a class list of methods used on chart paper (bring to next class)
- too much waste
not enough structure to Activity
- push, pull

Reminders

Supplies Needed

- | | | | | |
|-------------------|-----------|---------------|---------------|----------------------------------|
| - Baskets | - Straws | - Stir sticks | - Paper | * All supplies in central bucket |
| - Paperclips | - Rulers | - Elastics | - Chart Paper | |
| - Popsicle sticks | - Pencils | - Blocks | | |

Homework

- Bring back to carpet at end
- Discuss
- Make list (have students demo one method)

Notes

~~Need to re-think lesson~~

- Sit at carpet, block in middle
- "Is it moving?" → No
- "How can we move?" → categorize as push/pull
- Explain task → try to move block as many ways as possible, record in chart and label as push or pull
- students also use other materials to try new ways (marbles, chalk, straws, etc)

(only take a couple examples, but lead to idea that all methods are push or pull i.e. flick is a push, pick up is a pull)

Grade 2 Science

Lesson: 4-9

Unit: Movement

Topic: Describing Movement / Whiteboard

Lesson

- Put chart paper up and review movement techniques
- Hand out worksheet and explain activity
 - Draw and explain 4 techniques to move block
- Have students demonstrate techniques
- Students work on their drawings.
- When finished, students should review all of their worksheets so far in this unit to be sure they are all complete.

Reminders

Supplies Needed

- Chart Paper From last class
- Extra copies of previous worksheets
- Worksheets
- Quiz Note

Homework

Notes

Grade 2 Science

Lesson: 4-10

Unit: Movement

Topic: Quiz

Lesson

Reminders

Supplies Needed

Homework

Notes