

R.A.F.T.

BIG BOOKS – GRADE 2 SCIENCE EXAMPLE

DOK 4

R.A.F.T. stands for **R**ole, **A**udience, **F**ormat and **T**ask. This strategy provides authentic context, purpose and audience, and can be applied to any grade level or content area with appropriate adaptation.

- In this Grade 2 example, students become the experts (**R**) to create a “Big Book” (**F**) that explains a science concept (**T**). When finished, the class will visit a younger grade (**A**) to read the book to them.
- Materials – poster paper, cameras, printer, blank paper, sheets of 14x17 cardstock, markers or crayons.

LESSON PLAN

1. Prior knowledge –

- a. Students are familiar with Big Books from other classroom work.
- b. Students have received instruction on the target science concept (Grade 2 example: How do things move? SC.2.P.13.1).
- c. Verify/reinforce understanding of the concepts. Send student pairs to the playground to take pictures of things that move. In class, post the pictures and have the pairs explain what they observed. Ask:
 - How does it move? (wind, gravity, muscle power, machine)
 - What kind of movement is it? (push, pull)
 - Does the way it moves ever change? (stops, starts, speeds up, slows down, changes direction) Why? (change in amount of force)

2. Activity –

- a. Using a Big Book as an example, tell students they will be making one about the topic of study. Tell them, “You have been learning about how things move, and now you’re experts. But your friends in first grade will need to know this and they haven’t learned it yet. So we’re going to make a Big Book to teach them about it.”
- b. Ask them to tell you the parts of a Big Book (ex: front and back cover, title page, table of contents, introduction, subsections, etc.) Post a separate sheet of poster paper labeled with each part of the book for the students to see. On each sheet, have the class tell you what kind information should be on that page or part of the book and list or draw it.
- c. As a class, discuss what big ideas and details should be included for this topic (ex: What makes things move (wind, gravity, muscles, machines), What do the forces do? (push, pull), How do the forces change the way they move things? (start, speed up, slow down, change direction, stop). List these on poster paper.
- d. Based on your knowledge of student needs and abilities, assign work partners and pages. Tell the partners they must explain their topic with words and pictures. They may use photos, drawings, diagrams or charts.
- e. Students first draft their idea on paper, exchange with another pair for questions and critique, and revise to create a second draft on paper. Teacher circulates to assist.
- f. Once teacher approves the second draft, students are issued the cardstock to create their page(s).
- g. Teacher collates and binds the results. The class reads the book aloud to each other. (Revisions may still be made.) Then small groups pay pre-arranged visits to younger grades to read their book to the students.

STANDARDS FOR “HOW THINGS MOVE” GRADE 2 EXAMPLE

Science

SC.2.N.1.1:	Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.
SC.2.P.13.1:	Investigate the effect of applying various pushes and pulls on different objects.
SC.2.P.13.4:	Demonstrate that the greater the force (push or pull) applied to an object, the greater the change in motion of the object.

ELA

LAFS.2.W.1.2:	Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
LAFS.2.W.2.5:	With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
LAFS.2.W.2.6:	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
LAFS.2.W.3.7:	Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
LAFS.2.SL.1.1:	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. <ul style="list-style-type: none"> a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others’ talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
LAFS.2.SL.2.5:	Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
LAFS.2.L.1.1:	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ul style="list-style-type: none"> a. Demonstrate legible printing skills. b. Use collective nouns (e.g., group). c. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). d. Use reflexive pronouns (e.g., myself, ourselves). e. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told). f. Use adjectives and adverbs, and choose between them depending on what is to be modified. g. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).
LAFS.2.L.1.2:	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ul style="list-style-type: none"> a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.