

Goals and Assessment

Clarify that the goals indicate what students should understand and be able to do as a result of the activity. Make sure students understand that Chapter Assessments are based upon these goals.

Goal	Location in Activity	Assessment Opportunity
Determine factors that influence the stability of buildings.	Investigate Part A: Steps 5 – 7 Part B: Steps 4 – 6 Digging Deeper Check Your Understanding Questions 2, 5 Understanding and Applying Questions 4 – 5	Observations are correct. Responses to questions match those given in the Teacher's Edition.
Build models to assess the behavior of buildings during ground motion.	Investigate Part A: Steps 1 – 2, 6 Part B	Models are built according to instructions, useful for activity.
Design reinforcements to structures and re-test their structures.	Investigate Part A: Steps 6 – 7	Observations are properly recorded, logical reinforcements made.
Compare real structural failures to failure of their models.	Investigate Part A: Step 8 Part B: Step 6	Comparisons are thoughtful and accurate.
Suggest structural improvements for local buildings.	Understanding and Applying Question 2	Modifications are based on accurate information.
Identify types of motion that lead to structural failure.	Investigate Part A: Steps 5(c) – (d), 8(b) Digging Deeper	Responses to questions match those given in the Teacher's Edition.
Identify geologic conditions that enhance ground motion.	Investigate Part A: Step 8(c) Digging Deeper Check Your Understanding Questions 2, 4 – 5 Understanding and Applying Question 4	Responses to questions match those given in the Teacher's Edition.
Measure the natural frequency of different objects.	Investigate Part B Digging Deeper	Experiment completed correctly, measurements reasonable, accurately plotted.
Learn that natural frequency is a control on the stability of structures.	Investigate Part B Digging Deeper	Observations are accurate and reflect collected data.