

Instructional Framework

| Lesson segment | Student and teacher activities | Organization |
|---|---|-------------------------|
| Entry routine 1-2 minutes | <ul style="list-style-type: none"> • Students move at designated area to access name tags, clip boards, and aprons. • Students sit with their designated partner. | Independent |
| Review/ Overview 3-4 minutes | <ul style="list-style-type: none"> • Key vocabulary is addressed through word study. • Read aloud of lesson-related book, anecdote, or poem. • Essential question for the lesson is introduced and related to engineering design process: ask, imagine, improve, create, plan. | Whole class |
| Mini-lesson 4-5 minutes | <ul style="list-style-type: none"> • Target skill or strategy is modeled through think aloud. • Students are provided opportunities to “turn and talk” with their partner about their ideas and thinking strategies. | Whole class Partners |
| Exploration / Application 10-15 minutes | <ul style="list-style-type: none"> • Students begin problem-solving exploration. • Teacher begins conferring with students while noting common concerns and successes for targeted assistance. • Teacher continues observing, coaching, demonstrating, modeling, assessing. | Small group Partners |
| Mid-workshop teaching point 1-2 minutes | <ul style="list-style-type: none"> • Teacher mentions common concerns or successes or appropriate use of strategic thinking to the whole group to provide guidance and clarification. | Whole Class |
| Exploration / Application (Continued) 10-15 minutes | <ul style="list-style-type: none"> • Students continue problem-solving exploration. • Teacher continues conferring with students, noting common concerns and successes for targeted assistance. • Teacher continues observing, coaching, demonstrating, modeling, assessing. | Small group Partners |
| Teaching share 4-5 minutes | <ul style="list-style-type: none"> • Teacher reconvenes class for success sharing, review of key vocabulary and thinking strategy application. The essential question is revisited. | Whole Class |
| Dismissal routine 1-2 minutes | <ul style="list-style-type: none"> • Students move at designated area to return name tags, clip boards, and aprons. • Students line up to prepare for movement to their next activity. | Whole Class |