

Where This Fits in Your Year

Pennsylvania · Grade 5 · English Language Arts

Tom Swift, Young Inventor: Robot Olympics

Natural instructional unit

Evidence, responsible invention, and causal resolution

Place this pack in Grade 5 in Pennsylvania during a literature unit focused on evidence, technology-related themes, and how a sequence of actions changes an outcome. Lessons 2 and 3 establish the technical and narrative groundwork: students identify features that improve SwiftBot, then order the decisive ending events from MechaCrawler's defeat to SwiftBot's victory.

The middle of the pack broadens the analysis. Students examine Tom's character through his stated values and protective actions, determine technical vocabulary from context, state a theme about responsible and collaborative invention, and compare how two robot designs create both advantages and limitations.

The strongest culminating work is in Lessons 8 and 9 and the Full Plan. Students debate whether FugBot's apparent victory can stand after the later discovery, then write a causal explanation of how robot teamwork and the FugBot revelation resolve both the immediate danger and the competition. Use this as a compact evidence-based literature and technology-theme sequence rather than as a complete Grade 5 language arts unit.

Curriculum placement based on the student work required in this lesson pack.

<- All books

Tom Swift, Young Inventor: Robot Olympics

Book 5741 · Grade 5 · Read-Along

9 lessons, each with a full and a short version

1. Full Plan

TIME	50 minutes
OBJECTIVE	Develop four ending-focused products and synthesize how robot teamwork and the FugBot discovery change the final outcome.
STUDENT	Four skill products and one integrated evidence-based synthesis.
PRODUCT	
FOCUS	How actions, evidence, and discovery resolve the Robot Olympics.

Essential question

How do the robots' actions and the discovery about FugBot change the final outcome of the Robot Olympics?

Materials

Verified book source Prepared cited passages identified by the source-evidence locators Student evidence notes

Lesson sequence

1	Sequence and structure · 10 min Order the decisive ending events from SwiftBot's lifting action to first place. Prepared text: Passages 18, 19, 20, 21
2	Central idea and theme · 10 min Explain the idea that technology is most valuable when developed collaboratively and used to help others. Prepared text: Passages 1, 4, 18, 19
3	Evidence-based discussion · 10 min Defend whether FugBot's apparent basketball victory can stand after the later discovery. Prepared text: Passages 15, 20, 21
4	Evidence-based writing · 10 min Explain how robot teamwork and the FugBot discovery resolve both danger and competition. Prepared text: Passages 18, 19, 20, 21
5	Synthesis · 10 min Answer the essential question. Prepared text: Passages 18, 19, 20, 21

Teacher guidance

Evidence rationale: Every move in this Full Plan now contributes directly to the ending: the action sequence, the responsible-use theme, the legitimacy question, and the causal resolution.

Expected answer:	SwiftBot and RollerBot stop MechaCrawler, then FugBot is exposed as a disguised human; the discovery changes the standings and leaves SwiftBot in first place.
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Assessment

Look for:

- Places all four ending events in order.
- Explains how the FugBot discovery changes the result.
- Uses evidence from both action and discovery.
- Makes a clear claim about legitimacy.
- Writes a causal explanation with a supported conclusion.

Teacher note. Preview the cited episodes in context. Use neutral, source-bounded language; do not require personal disclosure; and distinguish story events from safe real-world conduct.

Short version · 20 minutes

1	Sequence and structure · 5 min Order the four ending events. Prepared text: Passages 18, 19, 20, 21
2	Evidence-based discussion · 5 min Decide whether FugBot's apparent win can stand. Prepared text: Passages 15, 20, 21
3	Evidence-based writing · 5 min Explain the causal resolution. Prepared text: Passages 18, 19, 20, 21
4	Synthesis · 5 min Answer the essential question. Prepared text: Passages 18, 19, 20, 21

2. Key details

TIME	20 minutes
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OBJECTIVE	Identify three features that help Tom and Yolanda improve or evaluate SwiftBot.
STUDENT	A three-detail chart naming each feature and its purpose.
PRODUCT	
FOCUS	SwiftBot's improvement and evaluation features

Essential question

Which mechanical, digital, and material features help Tom and Yolanda improve SwiftBot?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Identify the three feature categories. Prepared text: Passages 2, 3, 12
2	Purpose · 5 min Match gyroscope, recording, and muscle wire to their purposes. Prepared text: Passages 2, 3, 12
3	Design cycle · 4 min Explain how the features relate to design, testing, or revision. Prepared text: Passages 2, 3, 12
4	Student product · 6 min Complete a Feature/Purpose chart. Prepared text: Passages 2, 3, 12
5	Exit check · 2 min Name all three features accurately. Prepared text: Passages 2, 3, 12

Teacher guidance

Evidence rationale: The passages identify a mechanical improvement, a performance-review method, and the material behind SwiftBot's strength.

Expected answer:	The gyroscope improves balance, recorded practice supports analysis, and muscle wire supplies contracting artificial muscles.
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Support and extension

Above: Explain how the three features address design, testing, and revision.

Below: Use a two-column chart: Feature / Purpose.

Assessment

Look for:

- Names all three features.
- Explains each purpose from the text.
- Avoids adding technical claims not stated in the passages.

Short version · 10 minutes

1	Focus · 2 min Identify the three features. Prepared text: Passages 2, 3, 12
2	Evidence move · 5 min Match each to its purpose. Prepared text: Passages 2, 3, 12

3	Product · 3 min Complete the chart. Prepared text: Passages 2, 3, 12
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3. Sequence and structure

TIME	20 minutes
OBJECTIVE	Sequence four events that resolve the danger and determine the competition result.
STUDENT	A four-step event chain using transition words.
PRODUCT	
FOCUS	The ending from MechaCrawler's defeat to SwiftBot's victory

Essential question

What happens from SwiftBot's lifting action through the announcement that it takes first place?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Identify the four ending events. Prepared text: Passages 18, 19, 20, 21
2	Order · 5 min Arrange lift, disable, reveal, and first place. Prepared text: Passages 18, 19, 20, 21
3	Causal link · 4 min Explain how the FugBot discovery changes the result. Prepared text: Passages 20, 21
4	Student product · 6 min Write the event chain with transition words. Prepared text: Passages 18, 19, 20, 21
5	Exit check · 2 min State the result-changing discovery. Prepared text: Passages 20, 21

Teacher guidance

Evidence rationale: The passages present the decisive actions and revelations in chronological order.

Expected answer:	SwiftBot lifts MechaCrawler, RollerBot disables it, FugBot is exposed as a disguised person, and SwiftBot moves into first place.
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Support and extension

Above: Explain how the action climax and competition resolution are connected.

Below: Use: "First __. Next __. Then __. Finally __."

Assessment

Look for:

- Places all four events in order.
- Shows how the FugBot discovery changes the result.
- Uses transition words accurately.

Teacher note. Preview the cited episode in context. Use neutral, source-bounded language; do not require personal disclosure; and distinguish story events from safe real-world conduct.

Short version · 10 minutes

1	Focus · 2 min Identify the four events. Prepared text: Passages 18, 19, 20, 21
2	Evidence move · 5 min Order them and explain the result-changing discovery. Prepared text: Passages 18, 19, 20, 21
3	Product · 3 min Write the chain. Prepared text: Passages 18, 19, 20, 21

4. Character development

TIME	20 minutes
OBJECTIVE	Describe how Tom's priorities and actions develop from hopeful competitor to active protector.
STUDENT	A short character-development explanation supported by two or more moments.
PRODUCT	
FOCUS	Tom Swift's priorities and actions

Essential question

How do Tom's stated plan for the prize and his response to Persis show what matters to him?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Identify Tom's stated plan for the prize. Prepared text: Passage 4
2	Threat response · 5 min Identify Tom's response when he learns of the threat. Prepared text: Passages 17, 18
3	Compare values and action · 4 min Explain whether the later action is consistent with the earlier plan. Prepared text: Passages 4, 17, 18
4	Student product · 6 min Write the character-development explanation. Prepared text: Passages 4, 17, 18, 21
5	Exit check · 2 min Distinguish stated motive from observed action. Prepared text: Passages 4, 17, 18

Teacher guidance

Evidence rationale: The moments show Tom's concern for social benefit, his decisive response to danger, and the result of his actions.

Expected answer:	Tom begins with a goal larger than personal profit and later uses SwiftBot to protect Dr. VanderMeer.
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Support and extension

Above: Evaluate whether Tom's response to danger is consistent with his earlier values.

Below: Use: "Early, Tom plans to ___. Later, he directs SwiftBot to ___."

Assessment

Look for:

- Describes the charitable plan.
- Describes the protective action.
- Distinguishes motive from action.
- Avoids unsupported thoughts.

Short version · 10 minutes

1	Focus · 2 min Identify early and later moments. Prepared text: Passages 4, 17, 18
2	Evidence move · 5 min Compare stated value and later action. Prepared text: Passages 4, 17, 18
3	Product · 3 min Write the explanation. Prepared text: Passages 4, 17, 18, 21

5. Vocabulary in context

TIME	20 minutes
OBJECTIVE	Determine the meanings of locomotion and facsimile from contextual definitions and examples.
STUDENT	Two student-friendly definitions with one context clue for each.
PRODUCT	
FOCUS	The terms locomotion and facsimile

Essential question

What do locomotion and facsimile mean in the descriptions of the robot race and claytronic fabricator?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Locate the context around each term. Prepared text: Passages 7, 10
2	Locomotion · 4 min Use running, rolling, and scuttling as clues. Prepared text: Passage 7
3	Facsimile · 4 min Use the generated three-dimensional copy as the clue. Prepared text: Passage 10
4	Student product · 7 min Write both definitions and one clue for each. Prepared text: Passages 7, 10
5	Exit check · 2 min Use each term accurately. Prepared text: Passages 7, 10

Teacher guidance

Evidence rationale: One passage supplies movement examples; the other directly describes a generated three-dimensional copy.

Expected answer:	Locomotion means movement from place to place; facsimile means a close or produced copy of an original.
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Support and extension

Above: Use each term accurately in a new sentence about a different invention.

Below: Match each term with its strongest context clue.

Assessment

Look for:

- Defines both terms accurately.
- Uses a context clue for each.
- Does not add unsupported technical detail.

Short version · 10 minutes

1	Focus · 2 min Identify the two terms and clues. Prepared text: Passages 7, 10
2	Evidence move · 5 min Derive both meanings from context. Prepared text: Passages 7, 10
3	Product · 3 min Write both definitions. Prepared text: Passages 7, 10

6. Central idea and theme

TIME	20 minutes
OBJECTIVE	State a cautious theme about responsible invention and support it with events from the story.
STUDENT	A theme statement followed by three supporting details.
PRODUCT	
FOCUS	Responsible and collaborative uses of technology

Essential question

What idea about the responsible use of invention is suggested by Tom's work, plans, and actions during the crisis?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Separate theme from plot summary. Prepared text: Passages 1, 4, 18, 19
2	Earlier evidence · 4 min Identify collaborative work and social purpose. Prepared text: Passages 1, 4
3	Crisis evidence · 4 min Identify how the robots are used to protect a person. Prepared text: Passages 18, 19

4	Student product · 7 min Write the theme with three supporting details. Prepared text: Passages 1, 4, 18, 19
5	Exit check · 2 min Use cautious interpretive language. Prepared text: Passages 1, 4, 18, 19

Teacher guidance

Evidence rationale: The passages connect collaborative invention and social purpose with the robots' cooperation during the crisis.

Expected answer:	The story suggests that technology is most valuable when people develop it collaboratively and use it to help or protect others.
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Support and extension

Above: Consider how the same robots used for competition become tools for protecting a person.

Below: Use: "The story suggests inventions should be used to ___ because ___."

Assessment

Look for:

- States theme as an idea.
- Uses evidence from earlier and later parts.
- Signals interpretation with suggests or shows.

Short version · 10 minutes

1	Focus · 2 min State the theme. Prepared text: Passages 1, 4, 18, 19
2	Evidence move · 5 min Attach three details. Prepared text: Passages 1, 4, 18, 19
3	Product · 3 min Write the theme response. Prepared text: Passages 1, 4, 18, 19

7. Compare details

TIME	20 minutes
OBJECTIVE	Compare how RollerBot's and MechaCrawler's designs create both advantages and limitations.
STUDENT	A two-column comparison of design advantages and race difficulties.
PRODUCT	
FOCUS	Wheels versus multiple legs

Essential question

How do RollerBot's wheels and MechaCrawler's many legs help each robot, and what difficulties do they face in the obstacle race?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min Identify one design feature for each robot. Prepared text: Passages 5, 6
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2	Advantages · 4 min Explain one supported advantage for each. Prepared text: Passages 5, 6
3	Difficulties · 4 min Identify oil and pendulum difficulties. Prepared text: Passages 8, 9
4	Student product · 7 min Complete the two-column comparison. Prepared text: Passages 5, 6, 8, 9
5	Exit check · 2 min Use comparative language accurately. Prepared text: Passages 5, 6, 8, 9

Teacher guidance

Evidence rationale: The passages directly describe design advantages and then show how those designs interact with obstacle-course difficulties.

Expected answer:	RollerBot's wheels simplify movement but lose traction in oil; MechaCrawler's many legs support balance, but poor timing at the pendulum knocks it off course.
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Support and extension

Above: Explain why a design advantage in one situation may not guarantee success in another.

Below: Use rows for Advantage and Difficulty.

Assessment

Look for:

- Gives one advantage for each robot.
- Identifies a race difficulty.
- Uses comparative language accurately.

Short version · 10 minutes

1	Focus · 2 min Identify designs. Prepared text: Passages 5, 6
2	Evidence move · 5 min Compare advantage and difficulty. Prepared text: Passages 5, 6, 8, 9
3	Product · 3 min Complete the comparison. Prepared text: Passages 5, 6, 8, 9

8. Evidence-based discussion

TIME	20 minutes
OBJECTIVE	Discuss whether FugBot's initial game score determines the rightful winner after the later discovery.
STUDENT	A spoken claim with two cited reasons and a response to another speaker.
PRODUCT	
FOCUS	The legitimacy of FugBot's apparent victory

Essential question

Should FugBot's 11–9 basketball victory be treated as the final result after the later discovery? Why or why not?

Materials

- Verified book source

- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 3 min State an initial position. Prepared text: Passages 15, 20, 21
2	Evidence · 5 min Use the game result and disguise revelation. Prepared text: Passages 15, 20
3	Reasoning · 4 min Explain why the later evidence changes the outcome. Prepared text: Passages 20, 21
4	Student product · 6 min Deliver the claim and respond to another speaker. Prepared text: Passages 15, 20, 21
5	Exit check · 2 min State the final position clearly. Prepared text: Passages 15, 20, 21

Teacher guidance

Evidence rationale: The passages establish the apparent championship result and the later discovery that invalidates FugBot's status.

Expected answer:	No. FugBot appears to win the final game, but it is later exposed as a human disguise, after which SwiftBot takes first place.
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Support and extension

Above: Discuss the difference between winning an event and qualifying as a legitimate competitor.

Below: Use: "At first _____. However, investigators discover _____. Therefore _____."

Assessment

Look for:

- States a clear position.
- Uses both the game result and later discovery.
- Explains why the later evidence changes the outcome.

Short version · 10 minutes

1	Focus · 2 min State the claim. Prepared text: Passages 15, 20, 21
2	Evidence move · 5 min Use two reasons and explain the change in result. Prepared text: Passages 15, 20, 21
3	Product · 3 min Deliver the response. Prepared text: Passages 15, 20, 21

9. Evidence-based writing

TIME	25 minutes
OBJECTIVE	Write a concise evidence-based explanation of how cooperation and discovery resolve the ending.
STUDENT	One organized paragraph with a claim, at least three evidence details, and a concluding
PRODUCT	sentence.
FOCUS	The causal resolution of the attack and competition

Essential question

How do robot teamwork and the truth about FugBot resolve both the immediate danger and the Robot Olympics result?

Materials

- Verified book source
- Prepared cited passages identified by the source-evidence locators
- Student response materials

Lesson sequence

1	Launch · 4 min State a claim that addresses danger and competition. Prepared text: Passages 18, 19, 20, 21
2	Danger evidence · 4 min Explain how SwiftBot and RollerBot stop MechaCrawler. Prepared text: Passages 18, 19
3	Competition evidence · 4 min Explain how the FugBot discovery changes the standings. Prepared text: Passages 20, 21
4	Causal links · 4 min Connect the events with because, so, or therefore. Prepared text: Passages 18, 19, 20, 21
5	Student product · 7 min Write the paragraph and conclusion. Prepared text: Passages 18, 19, 20, 21
6	Exit check · 2 min Check that both parts of the question are answered. Prepared text: Passages 18, 19, 20, 21

Teacher guidance

Evidence rationale: The passages supply a compact causal chain: specialized abilities stop the threat, and the cheating revelation changes the official outcome.

Expected answer:	SwiftBot's lifting and RollerBot's treads stop MechaCrawler, while the exposure of FugBot's disguise leads to SwiftBot taking first place.
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Support and extension

Above: Explain how the ending reverses both Persis's plan and FugBot's apparent victory.

Below: Plan with four boxes: claim, stopping MechaCrawler, revealing FugBot, final result.

Assessment

Look for:

- Answers both parts.
- Uses at least three events accurately.
- Connects events with causal language.
- Ends with a supported conclusion.

Teacher note. Preview the cited episode in context. Use neutral, source-bounded language; do not require personal disclosure; and distinguish story events from safe real-world conduct.

Short version · 10 minutes

1	Focus · 2 min State the claim. Prepared text: Passages 18, 19, 20, 21
2	Evidence move · 5 min Use action and discovery evidence. Prepared text: Passages 18, 19, 20, 21

3

Product · 3 min Write the concise paragraph. Prepared text: Passages
18, 19, 20, 21