





# Sky Trail

SKIP & ALEX LANGE INNOVATION CENTER

## Station Synopsis:

Groups will demonstrate self-confidence by sending representatives to retrieve specific clue tags from sections of the SkyTrail. Each participant can retrieve only one tag from the trail. The group will work together to eliminate distractors, accurately sequence relevant clues, and determine the relationship between the clues in the quickest possible time.

## Scoring:

Time will be kept for collecting and accurately identifying 3 examples of reaction, dialogue, and action leads, with the slowest rotational group receiving 1 point, and the fastest rotational group receiving a total equal to the number of rotational groups participating. See the example to the right.

Group 3	29m 13s	6 points
Group 4	29m 52s	5 points
Group 1	31m 08s	4 points
Group 5	33m 41s	3 points
Group 6	35m 38s	2 points
Group 2	37m 59s	1 point

## Tasks:

1. Determine which tags each group member should target.
2. Safely and responsibly support group members traversing the skytrail.
3. Evaluate examples as relevant or irrelevant to the narrative lead categories provided.
4. Categorize them as Reaction, Dialogue, and Action Leads.

## Clues:

Examples from text.

## Constraints:

## Content Connections:

**ELA W.7.3b** Using narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.

## Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...

### SELF-CONFIDENCE

Possess belief in own ability to succeed and assert self when necessary.



# Rock Climbing

SKIP & ALEX LANGE INNOVATION CENTER

## Station Overview:

Groups will demonstrate strategic thinking by sending representatives to retrieve specific clue tags off of the climbing wall. Each participant can retrieve only one tag from the wall. The group will work together to eliminate distractors, accurately sequence relevant clues, and determine the relationship between the clues to title the timeline in the quickest possible time.

## Scoring:

Time will be kept for solving the puzzle, with the slowest rotational group receiving 1 point, and the fastest rotational group receiving a total equal to the number of rotational groups participating. See the example to the right.

Group 3	29m 13s	6 points
Group 4	29m 52s	5 points
Group 1	31m 08s	4 points
Group 5	33m 41s	3 points
Group 6	35m 38s	2 points
Group 2	37m 59s	1 point

## Tasks:

1. Determine which tags each group member should target.
2. Safely and responsibly support group member's ascent of the rock climbing wall.
3. Evaluate clues as relevant or irrelevant to the provided timeline.
4. Sequence the events appropriately on the provided timeline.
5. Determine the theme of each of the events and appropriately name each timeline.

## Clues:

Each tag will contain an historical event, which students will evaluate as relevant or irrelevant and appropriately sequence on the provided timeline.

## Constraints:

1. No more than 5 climbers can ascend the wall at a given time.
2. All climbers must check-in with Innovation Center personnel to be fitted with a harness and complete a safety check before approaching the wall.
3. Climbers may each only grab 1 tag at this station. The group may send as many climbers to approach the wall as time will allow. Any additional tags touched will be returned to the wall and will yield a 1 minute penalty to the group's time.

## Content Connections:

This station will be driven by timelines related to Social Studies Unit 2: Westward Expansion.

**IAS 8.1.18:** Describe the causes, courses, challenges, compromises, and consequences associated with westward expansion, including the concept of Manifest Destiny.

## Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...



Apply skills to clearly, effectively, and convincingly express ideas and messages to others appropriate to the environment.

Utilize critical thinking skills and perspectives of others to make informed decisions based on options, rewards, risks, limits, and goals.



# Orienteering

NORTH FIELDS

## Station Synopsis:

Your group will demonstrate time management & organization by dividing into three groups to complete three orienteering challenges that—if executed correctly—will yield a plastic capsule containing a component that the entire rotational group will use to complete an equation. The compass, map-to-scale, and GPS groups will regroup at the shelter in order to solve the variable listed on the poster. The group will accurately organize the components into the expression and solve for the variable in the quickest possible time.

## Scoring:

Time will be kept for creating a true expression and solving for a targeted variable, with the slowest rotational group receiving 1 point, and the fastest rotational group receiving a total equal to the number of rotational groups participating. See the example to the right.

Group 3	29m	13s	6 points
Group 4	29m	52s	5 points
Group 1	31m	08s	4 points
Group 5	33m	41s	3 points
Group 6	35m	38s	2 points
Group 2	37m	59s	1 point

## Tasks:

1. The rotational group will divide into three smaller teams to approach the challenge with a different orienteering tool.
2. The team will be provided with a heading, coordinate, or map with distance markings that can be used to find the plastic capsules containing components to complete their expression.
3. At the shelter, the team will reconvene and determine the order of the components to create a correct expression or equation and solve for a targeted variable.

## Clues:

Expression components provided by math teachers.

Distractors/alternative components included for close, but inaccurate coordinates.

## Constraints:

## Content Connections:

Math

# Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...

**TIME MANAGEMENT  
& ORGANIZATION**

Plan and organize long and short-term goals while understanding how to balance school, home, and community activities.



# Robot Round-Up

SKIP & ALEX LANGE INNOVATION CENTER

## Station Synopsis:

Students will exercise attention to detail by attempting this block-based coding challenge. In order to round up the figurines, students will plan a path for the robot to follow, create a step-by-step list of commands to give the robot to follow the path (including distance, speed, and headings), troubleshoot the initial commands, and successfully round-up all of the figurines into the pen. Time will be recorded when the final figurine is contained in the pen.

## Scoring:

Time will be kept for successfully completing the challenge, with the slowest rotational group receiving 1 point, and the fastest rotational group receiving a total equal to the number of rotational groups participating. See the example to the right. In the event that a group fails to secure all of the figurines by the time limit, the tiebreaker will be the number of figures that were contained in the pen as time was called.

Group 3	29m 13s	6 points
Group 4	29m 52s	5 points
Group 1	31m 08s	4 points
Group 5	33m 41s	3 points
Group 6	35m 38s	2 points
Group 2	37m 59s	1 point

## Tasks:

1. Group will be divided into 4 task-teams that will work in a relay fashion.
  - a. Task-team 1 will determine the optimal route.
  - b. Task-team 2 will roughly calculate the speed, time/distances for travel, and the headings to orient the robot.
  - c. Task-team 3 will input commands as block-based codes. An initial run will be conducted.
  - d. Task-team 4 will troubleshoot the code for adjustments.
2. If the group requires an additional attempt, reset the figurines before starting.
3. Repeat tasks 1c and 1d as necessary with input from all 4 task-teams.

## Clues:

Tip sheet provided based on task-team role within scientific method, engineering and design process, or process standards driving the unit.

## Constraints:

- 1.

## Content Connections:

Scientific method/process standards?  
Figures dependent on science content?  
Scenario adjusted to content.

# Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...

Attention to **DETAIL**

Achieve thoroughness and accuracy when accomplishing a task.





# Tallest Towers

## Station Synopsis:

Groups will demonstrate adaptability by working as a team to discuss strategy for building their tower. The group will divide evenly to complete 4 different tasks: Materials and Initial Design, Structural Analysis and Revision, Plan Communication, and Construction. Each unit will complete their task in isolation before they are ready to pass their work along to the next team. The team with the tallest standing tower at the end receives the most points.

## Scoring:

Time will be kept for completing the tower. At the end of the rotational period, the tower will be measured. The group with the shortest tower will receive one point, the second shortest tower will receive two points, and so on until the winner is determined, whose point total will equal the number of rotational groups attending camp that day. See the example to the right.

Group 3	19ft 2in	6 points
Group 4	14ft 1in	5 points
Group 1	13ft 10in	4 points
Group 5	13ft 3in	3 points
Group 6	8ft 10in	2 points
Group 2	7ft 11in	1 point

## Tasks:

1. Students will be divided into 4 task-teams for this activity.
2. Students may discuss approaches to their task for the challenge during a working lunch, but they may NOT communicate with other teams until the work is officially turned over.
  - a. Materials and Initial Design–Studies available materials and drafts an initial design for the tower. Students can provide only a written description of materials and building suggestions.
  - b. Structural Analysis and Revision–Consider the initial design for weak points. Suggest changes to the building strategy. Students must rephrase and add to initial design suggestions.
  - c. Plan Communication group may draw out the design for the structure, accounting for concerns and strategies identified by the other two task-teams.
  - d. Construction team will build the tower as tall as possible, without letting any pieces fall to the ground!

## Clues:

## Constraints:

1. Blocks may be moved, but **fallen blocks may NOT be** reused. Take care to intentionally place and secure materials!
2. Hardhats must be worn while building.

## Content Connections:

Science

Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...

**ADAPTABILITY** Manage transitions and adjust to changing situations and

responsibilities.



## Minefield

### Station Synopsis:

Groups will demonstrate collective problem solving and communication as each team works to get all of their team members through the minefield. The minefield is a set of obstacles within a designated space, that each person has to walk through with their eyes closed (or blindfolded) With each team member through the minefield, the team gets a clue to solving the puzzle.

### Scoring:

Time will be kept for solving the puzzle, with the slowest rotational group receiving 1 point, and the fastest rotational group receiving a total equal to the number of rotational groups participating. See the example to the right.

Group 3	29m 13s	6 points
Group 4	29m 52s	5 points
Group 1	31m 08s	4 points
Group 5	33m 41s	3 points
Group 6	35m 38s	2 points
Group 2	37m 59s	1 point

### Tasks:

1. Group divide into three task teams

### Clues:

### Constraints:

### Content Connections:

ELA

## Do *you* Have The Skills Indiana's Employers Are Searching For?

Students will develop and demonstrate their ability to exercise...

**PROBLEM  
SOLVING**

Apply critical and creative thinking skills to resolve problems.



# Archery

NORTHWEST ARCHERY RANGE

## Station Synopsis:

Students will strategize and demonstrate self-discipline by working independently and as a team to score as many points total on the archery target at possible. The group will split up into teams of 5, with each person being able to shoot 3 arrows. The Goal is to score as many points for your team as possible within a given time. Balloons of different sizes are worth different point value. But be careful- you don't want to pop the black balloons

## Scoring:

**On the target: 1 pt, large balloons: 5 pts, medium balloons, 10 pts, small balloons 15 pts. Black balloons negative 5 points, missed target: 0 points**

## Tasks:

1. Groups will split up into teams of 5. Listen carefully to the archery briefing from the range master.
2. Each person should take at least 1 practice shot before trying for the target with the balloons.
3. After everyone has had a chance to practice. Decide the order in which your team will shoot
4. One team member must be keeping track of points for your group
5. Your team will have 15 minutes for everyone to first their 3 arrows and get as many points as possible.
6. Once the 15 minutes are up, calculate your teams score and report it to your teacher.
7. When instructed, all team members need to retrieve the arrows from the range.

## Clues:

## Constraints:

8. All archers must follow range master rules, if anyone is caught breaking the safety protocol they will not be able to participate
9. Each archer can only shoot 3 arrows. The team can decide how many each archer shoots at one time.

## Content Connections:

ADMIN/SEL

**Do *you* Have The Skills Indiana's Employers Are Searching For?**

Students will develop and demonstrate their ability to exercise...

## Self-Discipline

Demonstrate self-control and behave in accordance to rules with minimal direction.