

Performance Expectations	Level 1	Level 2	Level 3	Level 4
LG 1. I know my teammates & my instructor & can name at least 4 topics we'll study this year.	I know the name of one of my teammates and can name 1 topic we will study this year.	I know the name of two of my teammates and can name 3 topics we will study this year.	I know the name of ALL of my teammates + 2 others & can name 4 topics we will study this year.	I know the name of All of my teammates + 4 others and can name more than 4 topics we will study this year.
LG 2. I've set goals for my Leadership, Participation & Teamwork this year & have kept focused on each.	I haven't set goals for my L-P-T this year and haven't explained them to my parents	I have set goals of all 3 of my L-P-T areas and have explained each goal with my parents	I have kept focused on meeting each L-P-T goal and can explain at least one example of each goal.	I can clearly explain at least two in class examples that tell how I've met each of my LPT goals.
LG 3. I know the class Expectations, Class Rules and Lab Rules.	I do not know our: <ul style="list-style-type: none"> • class expectations, • general class rules • lab rules 	I know most of our: <ul style="list-style-type: none"> • class expectations, • general class rules • lab rules 	I know & can follow all: <ul style="list-style-type: none"> • class expectations, • general class rules • lab rules 	I can show & explain all our <ul style="list-style-type: none"> • class expectations, • general class rules • lab rules ... to other students
LG 4. Know what science is & isn't, why to study science, & key characteristics of scientists.	I can not tell <ul style="list-style-type: none"> • what science is or, • why to study science, or • any key characteristics of science. 	I can mostly tell <ul style="list-style-type: none"> • what science is • why to study science • 2-3 key characteristics of science 	I can tell <ul style="list-style-type: none"> • what science is • why to study science • the key characteristics of science 	I can explain to others <ul style="list-style-type: none"> • what science is • why to study science • the key characteristics of science
LG 5. I can show a wind up toy moving and draw how energy goes in, through & out of the wind up toy.	I am able to draw the wind-up toy at rest, but not moving nor show how energy goes in/out & through the toy.	<ul style="list-style-type: none"> • I am mostly able to: • draw the wind-up toy moving • show how energy goes in/out & through the toy. 	I can <ul style="list-style-type: none"> • Draw a wind-up toy moving & • Show how energy goes in/out & through the toy. 	I can explain to others <ul style="list-style-type: none"> • how to draw a wind up toy moving & how energy goes in/out & through the toy.
LG 6. Know how to access & use goscienceseven.com and Edmodo.com	I haven't created an Edmodo account, or don't know how to access my account.	I've set up my Edmodo account and can access my account reliably.	I can: <ul style="list-style-type: none"> • respond to assignment messages, • finish an Edmodo exam • tell how I scored on an exam. 	I can show others how to: <ul style="list-style-type: none"> • create an account • respond to assignment messages • take an exam & access final results

Student Leadership, Participation & Teamwork Self-Assessment

Tell 2 examples of your LPT skills per area to support your score

1 – Below Standard, 2 – Approaching Standard, 3 – Standard, 4 – Above Standard

1. Leadership: Explain w/2 examples: _____

2. Participation: Explain w/2 examples: _____

3. Teamwork: Explain w/2 examples: _____

Student Growth, Learning Progress and Goal Setting. Please complete each section as indicated below.

- 4. Tell three concepts/learning goals that you have shown growth in. Explain.
 - a. _____
 - b. _____
 - c. _____
- 5. Tell three concepts/learning goals you still need more growth in. Explain.
 - a. _____
 - b. _____
 - c. _____

Parent Signature _____ Date: _____

Comments: _____

Instructor Review - To be completed by your instructor

1 – Below Standard, 2 – Approaching Standard, 3 – Standard, 4 – Above Standard

- 1. Activities completed
- 2. Corrections made in red pen
- 3. Self-assessment & learning goals completed above.....
- 4. Parent review completed
- Portfolio Score.
- Leadership, Participation & Teamwork rating.....

Leadership, Participation & Teamwork Rubric

	Leadership How you take charge of your own education.	Participation How you actively participate in your own education.	Teamwork <small>ver. 6/2015</small> What you do to help our team learn better.
4.	<ul style="list-style-type: none"> Always takes initiative & accepts responsibility for own actions. Flexible, resilient learner who often helps others. Self motivated learner who is always prepared, on time, respectful & follows class rules Regularly helps motivate others get the best possible education. Assignments on time, above standard work in quality and quantity. 	<ul style="list-style-type: none"> Positive influence who always actively & passively participates. Often encourages others to participate in class & team discussions. Able to explain purpose & content of labs & lessons to others. Contributes ideas to help improve class discussions. Focused on task at hand, changes between tasks easily, always helps others refocus on task. 	<ul style="list-style-type: none"> Actively helps the class & team to work together to accomplish tasks on time. Always builds trust & helps resolve team & partner conflicts. Always keeps positive communications & relationships in class/team. Transitions between tasks easily. Keeps teamwork safe & at standard. Gives positive recognition to peers.
3.	<ul style="list-style-type: none"> Shows initiative often takes responsibility for own actions. Self motivated learner who often helps others. Always prepared, on time, on task, & asks for help when needed. Assignments on time, always redoes work to standard when needed. Respects others and class rules 	<ul style="list-style-type: none"> Actively & passively participates in class & team discussions, takes notes without prompting. Encourages others to participate Always knows purpose & content of labs & lessons. Volunteers information appropriately. Always on task, encourages others stay on task. Listens well & respects others 	<ul style="list-style-type: none"> Actively works with partner or team get the job done. Helps team resolve conflicts. Helps keep positive communications & relationships in class & team. Keeps team on task & safe Team jobs done on time. Assures work area cleaned to standards, helps others clean without being told.
2.	<ul style="list-style-type: none"> Sometimes shows initiative Takes responsibility for own actions most of the time. Motivated most of the time Completes work redo's, but not always to standard. Mostly respects others & class rules. On time / Prepared most all the time. 	<ul style="list-style-type: none"> Engages in class/team discussions, takes notes when prompted. Often knows purpose & content of labs & lessons. Rarely needs reminder to be on task. Listens to & respects others most of the time. Asks questions once in awhile 	<ul style="list-style-type: none"> Mostly works with partners or team to get the job done. With minor exceptions, keeps positive communications & relationships in class/team Keeps team safe. Will work with partners or teammates only when asked. Team sometimes not done on time. Work area not always clean
1.	<ul style="list-style-type: none"> Sometimes takes responsibility for own actions. Shows little motivation to improve their education. Assignments often low quality Often says they will redo work, but rarely does so. Rarely asks for help. Rarely respects others or class rules Sometimes late or unprepared 	<ul style="list-style-type: none"> Rarely participates. Needs to be told to take notes Sometimes knows purpose & content of labs & lessons. Mostly on task, sometimes needs reminding to stay task. Doesn't listen to, or respect others often Blurts out in class once in awhile 	<ul style="list-style-type: none"> Sometimes works with partner & team to get the job done. Communications & relationships in class/team not always positive. Follows safety rules Will work with partners only when asked, often stops when instructor leaves. Rarely helps clean work area.
0.	<ul style="list-style-type: none"> Not responsible, on time or prepared Not self-motivated learner, relies on others to do the work. Assignments missing or incomplete. Doesn't attempt to redo work. Doesn't ask for help Doesn't respect themselves, others, or class rules. Often late or unprepared for class. 	<ul style="list-style-type: none"> Never participates willingly Rarely knows purpose and content of labs/lessons. Speaks out (Blurts) in class Mostly off task – often not listening to class discussion or doing assignments. Doesn't listen to, or respect others. Does side discussions 	<ul style="list-style-type: none"> Not on task with partners or team or doesn't work together with others. Communications & relationships not positive. Causes safety issues. Avoids tasks, even when asked. Totally relies on others to do their work. Distracts others. Doesn't help, avoids cleaning

Day One – Find Initial Seats, Academic Plan, Student Form, Meet the students, Meet the Course,

A. Go over the course Academic Plan – Due Fri

B. Explain Unit Portfolio

- 1. _____
- 2. _____

C. The Reporter Exercise = My teammate’s names are:

- 1. _____
- 2. _____
- 3. _____

The student’s names in another team are:

- 1. _____
- 2. _____
- 3. _____
- 4. _____

D. What topics are we going to study in Science this year? List at least four that interest you:

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____

E. Grade Composition – My grade is composed of the following data.

- 1. **Leadership, Participation & Teamwork** _____ % of your final grade
- 2. **Assignments & Checkpoints** = _____%
- 3. **Test & Quiz** = _____%

Leadership, Participation & Teamwork goal setting. *Must select 3 or above. Next select goal areas to work on.

My goal in **Leadership** is to perform at a _____ level (Enter a 3, 3.5 or 4 here)

Goal areas I have to work on to achieve this level: _____

My goal in **Participation** is to perform at a _____ level (Enter a 3, 3.5 or 4 here)

Goal areas I have to work on to achieve this level: _____

My goal in **Teamwork** is to perform at a _____ level (Enter a 3, 3.5 or 4 here)

Goal areas I have to work on to achieve this level: _____



Day One Assignment: Parents,

a. Please review the Course Academic Plan with your student & sign. This is due signed by Friday

b. Please jointly discuss and review the Leadership, Participation and Teamwork goals and matrix (above) with your student so you can help support their efforts to progress in these important skills this year. If you wish, please briefly comment, or have your student write in your thoughts, as appropriate, and sign below.

Comments on your student’s goals _____

Student Signature

Parent Signature

Day Two – General Rules, LPT rules, Team work 14 on a Nail, Why should you learn Science?

Opening Topic: What do you think are the most important elements of Leadership, Participation and Teamwork?

Expectations

A. Share what you think are the 3 most important expectations to follow in a classroom. Then record our class’s key expectations below.

1. _____
2. _____
3. _____

B. General Rules

- **Start day** a. _____ b. _____
- **End of Day** a. _____ b. _____
- **Tardy:** a. _____ b. _____
- **Talking in class:** a. _____ b. _____
- **Signals for Quiet:** a. _____ b. _____ c. _____
- **Roaming around:** a. _____
- **Hands off areas:** a. _____ b. _____ c. _____
- **Substitute (Guest)** a. _____
- **Restroom** a. _____ b. _____

General Work Rules

- **Absent make up work** a. _____ b. _____
- **Late Passes** a. _____ b. _____ c. _____
- **Work Redos** a. _____ b. _____ c. _____
d. _____
- **Test Redos** a. _____
- **Grade entry errors** a. _____

C. Lab team Rules

1. Do Lab _____ & Safety _____
2. Quietly _____ & Don _____
3. Choose _____ (Team Leader, Operators, Recorders, Timekeeper etc)
4. Read, Reread, Follow, & Check Off instructions _____
5. Everyone takes _____
6. Clean _____ & _____ when done

D. Fourteen on a Nail Lab exercise

1. **As a team, follow the Lab Rules & solve the problem**
2. **Write a reflection below when you are finished – Refer to your LPT Rubric**

Reflection about my Leadership, Participation & Teamwork during the 14 on a Nail exercise.

Day Two Assignment: You have two upcoming events that you'll have to prepare for today.

- a. **Complete the 14 on a Nail Reflection if not already done.**
- b. **Be sure to get your Science Academic Plan signed & to me by Friday.**
- c. **Supplies Check – next week! Please having all supplies listed. Having extras is above standard.**
- d. **Exam on this Unit's content. Study this packet after school each day until the Exam. (Exams & Quizzes have a number of styles of questions. Some of these could be: Multiple answer, fill in, matching, essay etc.) Please study daily to be ready each time!**

Day Three – Why is it important for us to study science? Wind-up toy Challenge

Intro.

Collect Signed Academic Plan & Bang the Drum!

A. The instructor: Write 4 specific things you inferred about your instructor from the ppt.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Why is it important to study Science. It is important to study science because:

- 1. Learning more about science has _____.
 - 2. Science develops your _____.
 - 3. So many _____!
 - 4. Science is the foundation & context _____.
 - 5. Strong scientific enterprise is _____, _____,
& _____.
 - 6. Progress in science & technology is _____. As a citizen you
have to _____.
 - 7. Science skills allow you to take a _____ and
_____ about Science matters.
 - 8. Understanding science helps people act _____.
 - 9. Our country's _____.
 - 10. Studying science (and math) can _____!
-

B. Wind Up Challenge: A review of sixth grade physical science skills. You will work with one partner to complete the following tasks. Afterwards please share and adjust each figure with all team members.

Your Mission has two parts. Each student must have his/her own drawings. [Cause & Effect]

Figure 1 - First draw & Label what you see. Show wind-up toy at Start and Moving. Use neat arrows and labels to show each type of movement. (Use note paper for a draft first.)

Figure 2 – Next draw what is happening INSIDE the wind-up toy as a system at Start and Moving. Show and label all transfers of energy with arrows & labels. (Use note paper for a draft first.)

- A. For Inputs of energy into the system use red arrows.
- B. For flows of energy inside of the system as you infer them to be use purple arrows
- C. For flows of energy coming out of the system use orange arrows

Figure 1 – The Wind Up Toy Movement Path - Outside

Wind-up toy at start

Wind- up toy moving

Figure 2 – Show the Wind-up Toy as a System showing Energy Transfers Inside

Wind-up toy system at start

Wind- up toy system moving

Day Three Assignment:

- a. Complete Wind-toy diagram.
- b. Double check all Supplies for Check.
- c. Go over this week’s content.

Day Four: Characteristics of a Scientist, Explore goscienceseven.com website, quick quiz

- Intro:
- a. Day Goals, Take out iPads
 - b. Discuss figures from Wind Up Toy Challenge

A. Brainstorm the 10 Characteristics of a Scientist. On your portfolio notes write as many of the characteristics you think scientists share. Next put the ten from the presentation below.

- | | |
|----------|-----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |

B. Team Challenge: scavenger hunt on goscienceseven.com website where many of your key resources are located.

- 1. Open iPad, sign in, go to goscienceseven.com. Help your team mates if needed.
- 2. (After orientation) Locate where to find the following:

i. Explain how to get to the online textbook. User Name = skyviewjrhs Password = jschmied

ii. How to format a graph properly. _____

iii. Find the Safety Scavenger Hunt Self Quiz: _____

iv. Locate Population 911: _____

v. The Observation & Inference online presentation _____

C. Edmodo - Go to Edmodo.com

Check when done

- Create a sign in
- Click on Avatar, take photo in Photo Booth, select
- Find a quote you like
- Follow link to learning style, select one
- Select a career goal
- Go to Account, enter your student # @apps.nsd.org email

You are all set!

Day Four Assignment: Things to do for today.

- a. Finish Team Challenge on goscienceseven.com & Edmodo
- b. Double check all Supplies for Check.
- c. Go over this week’s content

Day Five/Six Tues/Weds: What is Science, What isn’t Science? Practice Quiz

- Intro:
- a. Today’s work. Get Laptops, sign in, close cover
 - b. Review yesterday’s jobs.
 - c. Practice Quiz
 - d. (Rest of period) What is Science?
 - e. All Weds= What isn’t Science? Review if time.

What is & isn’t science?

Answer these questions in complete sentences reflecting the question.

1. Tell what Dr. Railsback says science is.

2. Explain what Science uses to base all scientific understanding?

3. Tell how science is done.

a. _____

b. _____

4. Tell the two types of Science and give one example of each.

a.Type1 _____ example _____

b.Type2 _____ example _____

5. What are all scientists attempting to do?

6. Generally, there are two things in common amongst all scientists. Tell what they are:

1st. _____

2nd. _____

7. Tell why Science isn't Art. _____

8. Explain why Science isn't Technology. _____

9. Science is often confused with Truth or Certainty. Tell why that is not so.

10. People often compare religious beliefs with Science. Why is this not possible?

11. Tell the three basic questions asked in science ...***

a. _____

b. _____

c. _____

Day Five – Six Assignments: Things to do for today.

- a. Have What is / isn't Science complete
- b. Double check all Supplies for Check on Thursday . Extras are above standard.
- c. Go over this week's content => Final Quiz early next week .

Day Seven/ Eight Thurs & Friday: What is Science, What isn't Science? Practice Quiz

Intro: a. Today's work.

b. Review yesterday's jobs.

A. Quick Practice Quiz

B. Introduction to Observations and Inferences

Observations

An observation is the gathering of _____ using these **five senses**:

- | | | |
|----|----|----|
| 1. | 3. | 5. |
| 2. | 4. | |

What are the **two types** of observations? More on these later!

- | | |
|----|----|
| 1. | 2. |
|----|----|

Inferences

Inferences are: _____

2. Inferences are **based on** your _____ and _____.
3. Inferences are often _____

#1 Observation: *The grass on the school's front lawn is wet.*

Work with your team to brainstorm and write in possible inferences:

- | | |
|----|----|
| 1. | 2. |
| 3. | 4. |

Inferences is based on _____

#2: Observation: *The school fire alarm is going off!* Possible inferences:

Work with your team to brainstorm and write in possible inferences:

- | | |
|----|----|
| 1. | 2. |
| 3. | 4. |

Each is a _____ for why the fire alarm is going off.

Qualitative observations *describe* _____.

“Qualitative” = _____ (_____)

Qualitative observations use _____ **to** describe observations and make data.

Example: *The flower has _____ petals.*

Example: *Mr. M is very _____!*

Quantitative observations _____ what is observed.

“Quantitative” = _____ (_____)

Quantative observations use _____ to _____ data.

Example: *The flower has _____ petals.*

Example: *Mr. M weighs _____ pounds.*

Which Is Better? Both types of observations are valuable in science. However, in an experiment _____ can be precisely and objectively compared.

Qualitative: *The road is _____ . (describes)*

Quantitative: *The road is _____ long. (measures)*

Scientists can use innovative ways to convert qualitative observations into quantitative observations.

Converting Qualitative observations into Quantitative data

Example: Your big, dead fish is smelly, but how can this smell be measured?

How would someone else know how smelly the fish actually is?

To solve this problem scientists would make _____ “_____”

What about using a _____ from 0-5, with a _____ as Nauseating and a _____ for no smell at all? This would allow other people to compare how smelly your fish is to theirs.

Complete the section below on your own.

Give two examples of your own of qualitative measurements.

- 1.
- 2.

Give two examples of your own of Quantitative measurements.

- 1.
- 2.

Data Table One – Observations and Inferences		
Slide or Station	Observations	Inferences
One		
Two		
Three		
Four		
Five		
Six		
Seven		
Eight		
Nine		

