

Watershed Guardians Teacher Resources

Supported Standards

Suggested activities prior to a field trip

Activity	In Class Time
Crumpled Paper Watershed link	30 mins
Nature Journal	15-30 mins
A Drop in the Bucket link	15 mins
Background/Protocols**	45+ min
Gear Practice***	30+ min
Develop a Testable Hypothesis link	60+ min

**Required prior to a field trip

***Add on - not in standard pathways

Field Trip - half day or full day field trip (2 - 5 hours)

- Water Quality Monitoring
- Nature Journaling
- Data Entry
- Park/Watershed Clean-up
- Other organization team-up

Suggested activities after a field trip

Activity	In Class Time
Data Entry	30 mins
Data Analysis	45+ mins
Action Project	1 or more classes
Reflection	30 mins
Research Symposium	Full Day

Assume about 60 minutes in class

1 day option:

- Crumpled Paper Watershed + Nature Journal outdoors on campus

Class combined with Field Trip options:

All field trips require a background/using gear lesson - this lesson should take place within 1 about week of the field trip

2 day option: (total time in class listed) 1 in class + 1 out of class

- 60+ min in class – Crumpled Paper Watershed+ Background/Protocols + field trip

3 day options:

2 Classes before + 1 Field Trip (Can spread out class visits, background should be near field trip)

- A Drop in the Bucket + Crumpled Paper Watershed + Nature Journal on campus + Background/Protocols + Field Trip w/in one week
- Background/Protocols + Develop a Testable Hypothesis + Field Trip w/in one week

1 Class before + 2 Field Trips

- See 2 day options above + add a second Field Trip, suggestion to have one site very near to campus, the other further along the watershed (ie Gabilan Creek, and Salinas River Wildlife Refuge or Arroyo Seco)

1 Class before + 1 Field + 1 Class After

- Crumpled Paper Watershed + Background/Protocols + Field Trip w/in one week + Data Analysis + Reflection
- A Drop in the Bucket OR Nature Journal on campus + Crumpled Paper Watershed + Background/Protocols + Field Trip w/in one week + Data Analysis + Action Project

4 day options:

2 Classes before + 1 Field Trip + 1 Class After

- A Drop in the Bucket + Crumpled Paper Watershed + Background/Protocols + Field Trip w/in one week + Data Entry + Data Analysis
- A Drop in the Bucket + Crumpled Paper Watershed + Nature Journal on campus + Background/Protocols + Field Trip w/in one week + Data Analysis + Reflection
- Background/Protocols + Develop a Testable Hypothesis + Field Trip w/in one week + Data Analysis + Action Project

*1 Class before + 2 Field Trips** + 1 Class After*

**Suggestion to have one site very near to campus, the other further along the watershed (ie Gabilan Creek, and Salinas River Wildlife Refuge or Arroyo Seco)

- Background/Protocols + *Field Trip* w/in one week + Data Entry + Data Analysis
- Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Data Analysis + Reflection
- A Drop in the Bucket OR Nature Journal on campus + Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Data Analysis + Action Project

1 Class before + 1 Field Trip + 2 Classes After

- Background/Protocols + *Field Trip* w/in one week + Data Entry + Data Analysis + Action Project
- Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Data Analysis + Reflection
- Background/Protocols + Develop a Testable Hypothesis + *Field Trip* w/in one week + Data Analysis + Action Project

5 day options:

2 Classes before + 1 Field Trip + 2 Classes After

- A Drop in the Bucket + Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Data Entry + Data Analysis + Action Project + Research Symposium
- A Drop in the Bucket + Crumpled Paper Watershed + Nature Journal on campus + Background/Protocols + *Field Trip* w/in one week + Data Entry + Data Analysis + Action Project + Reflection + Research Symposium
- Background/Protocols + Develop a Testable Hypothesis + *Field Trip* w/in one week + Data Entry + Data Analysis + Action Project + Reflection + Research Symposium

1 Class + 1 Field Trip + 1 class + 1 Field Trip + 1 Class After

- Background/Protocols + *Field Trip* w/in one week + Develop a Testable Hypothesis + *Field Trip* + Data Entry + Data Analysis
- Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Develop a Testable Hypothesis + *Field Trip* + Data Analysis + Reflection
- A Drop in the Bucket OR Nature Journal on campus + Crumpled Paper Watershed + Background/Protocols + *Field Trip* w/in one week + Develop a Testable Hypothesis + *Field Trip* + Data Analysis + Action Project

Project Based Learning Opportunities

Each option **marked with blue** can truly be considered a project based learning opportunity for students. If a teacher wanted to include a lab write up or a hypothesis of their own, other options could be included as well.