

# Trash Timeline

Students are introduced to Tread Lightly! through a good idea/bad idea activity. They further explore the principle of Do Your Part by discovering how long it takes trash to decompose in a desert environment.

**Grade Level:** 3rd

## Objectives:

- Students will be able to list at least three of the five Tread Lightly! principles and one way to follow each of them.
- Students will make the connection that trash needs to be thrown away because it takes so long to decompose.

## Materials:

- Ethics dash scenarios
- Ethics dash signs
- Eight cones
- Four sets of trash timeline cards
- Master set of trash timeline signs
- Tread Lightly! principle signs

## Appendixes:

- Ethics dash scenarios: Page 4
- Ethics dash signs: Pages 5-6
- Trash timeline cards: Page 7
- Master trash timeline cards: Pages 8-18

## Time Considerations:

Preparations: 10 minutes

Lesson Time: 40-50 minutes

*Activity 1: 20 minutes*

*Activity 2: 15-20 minutes*

*Conclusion: 5-10 minutes*

## Related Activities:

Tread Monster, Tread Lightly! Memory, Recreation Role Plays, Are You Prepared?, Stop the Invasion!



## Nevada Department of Education Standards

### Health - Self Management

**7.5.1** - Demonstrate behaviors that avoid or reduce health risks.

**8.5.1** - Describe ways to influence and support others to make positive health choices.

## Excellence in Environmental Education Guidelines

### Strand 4 - Personal and Civic Responsibility

**B)** Learners understand the basic rights and responsibilities of citizenship.

**D)** Learners understand that they have responsibility for the effects of their actions

**This lesson has been adapted from:**

Leave No Trace Center for Outdoor Ethics. (2007). Okay vs. no way and Trash timeline. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 49 and 63).

## Background

### Tread Lightly! principles:

#### Travel Responsibly

- Stay on designated trails and areas
- Go over, not around, obstacles
- Cross streams at designated fords
- Avoid wet, muddy trails when possible

#### Respect the Rights of Others

- Share the trail with other recreational users so they can enjoy their activities undisturbed
- If you're crossing private property get permission
- Leave gates as you found them
- Yield the right of way to those passing you or traveling uphill

#### Educate Yourself

- Have a map of the area so you won't get lost
- Find out the regulations of

the public lands you're visiting

- Know how to operate your equipment safely

#### Avoid Sensitive Areas

- such as meadows, lakeshores, wetlands and streams
- Respect wildlife and their habitat
- Avoid disturbing historical or archeological sites

#### Do Your Part

- Model appropriate behavior
- Leave the area better than you found it
- Properly dispose of waste
- Minimize use of fire
- Avoid spreading invasives
- Restore degraded areas

#### Trash Timeline:

- Banana peel: Up to 2 years
- Cigarette butt: 1-5 years
- Wool socks: 1-5 years
- Plastic-coated paper: 5 years
- Plastic bags: 10-20 years

- . Leather: 50 years
- . Steel can: 50 years
- . Plastic 6-pack holder: 450 years
- . Aluminum can: 500 years
- . Disposable diaper: 500 years
- . Glass bottles: 1,000,000 years

## Preparations

The Ethics Dash is best outside, but can be adapted for inside if weather isn't cooperating. Set up activity field with two safety zones at the either side - like a football field.

If you're short on time or numbers you can adapt the Ethics Dash by setting up the playing field and designating the sides good idea and bad idea then have the students stand in the middle and race to the side they think is correct after the scenario is read.

To adapt the Ethics Dash for indoors, have students line up in the middle, read the scenario, then they choose a side and debate which answer is correct.

## Doing the Activity

### **Introduction:**

After Introducing yourself ask students how many like to hike? ride ATVs? Camp? Fish?...be outside? Hopefully everyone raises their hand by the end. Tell the students that it's great that they like to be outside, because what we're going to talk about pertains to them.

Ask students if anyone has heard of Tread Lightly! before. If so, have the student share with

the class what Tread Lightly! means to them. (responsible outdoor recreation)

Tell them that today we're going to learn about the principles of Tread Lightly!, through a tag activity. Then we're going to take a closer look at the principle Do Your Part, by discovering why it's bad to litter.

### **Activity 1: Ethics Dash**

Take the class outside to the activity field.

Split the class into two groups and have them line up facing each other in the middle of the field with their backs to the safety zones, designate one team to be the good idea team and one to be the bad idea team.

Tell them you're going to read a scenario then they have to decide if it's a good idea or a bad idea. When you say go - the corresponding team will have to run to their safety zone, which is the zone behind them, while the other team tries to tag them. So if it's a good idea, the good idea team will try to run to their safety zone while the bad idea team tries to tag them. Any of the people that are tagged become part of the bad idea team.

For example I say...You finish with a bag of chips and you throw the bag on the ground instead of in a trash can. Is that a good idea or bad idea? (Bad idea!) So those of you on the bad idea team would try to run to your safety zone behind you and those of you on the good idea team would try to tag them.

After we figure out the correct answer we'll come back to the center line and try the next one.

Go through the Ethics Dash scenarios - as many as time and/or attention span allow.

Evaluate how the teams did; then tell them we're going to take a closer look at the principle Do Your Part.

### **Activity 2: Trash Timeline**

Tell the class that you are going to divide the class into four groups, each group is going to get a set of trash timeline cards. They'll have to match the item with the amount of time it takes that item to decompose (break down) in the desert - only one item goes with each time card.

Give them a hint - a leather glove takes 50 years to decompose in the desert. So that will be their first match.

Divide the class into four groups and give each group a set of trash timeline cards.

Post the master set of trash timeline years on the board with the leather gloves at 50 years.

Give the groups about five minutes to see what they can match up. Then as a class go over the answers year by year, have the groups say what they put, then post the correct answer on the board.

You can put it into context for them, but asking how old they are and saying how old you are - that garbage would still be

around. If a caveman put a glass bottle on the ground, it would still be here.

Ask the students what would happen if we didn't do our part? If we litter, that banana peel, plastic bag or especially glass bottle would be around for a long time.

## Conclusion

Ask students how else they plan on following the Tread Lightly! principles.

Ask the students if they remember the five principles of Tread Lightly! you went over during the game outside? Ask them to help you remember them and ways to follow them? (Post the principle signs on board as they name them.) Remind them that Tread Lightly! is so important because we need to protect the land if we want to continue to enjoy it.

## Assessment

Informally evaluate participants' knowledge by noting how many

## Vocabulary

**Decompose:** when an object breaks down

**Invasive Species:** a non-native species that takes over native species' habitats

students raise their hands to answer the questions during the conclusion and if you get correct answers.

## Sources

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## Ethics Dash Scenarios

1. **You find some litter along the trail and you pick it up.** (Good idea - even though it's not your trash, it helps the environment if you take the litter to where it belongs - a trash can. Remember - Do Your Part!)
1. **You are riding your ATV and come upon a trail with standing water and deep ruts in the mud. You decide to try riding the trail in a month when it dries out. Go!** (Good idea - You should avoid muddy trails when possible. Going on them could damage the land and cause erosion. Remember - Travel Responsibly!)
2. **You are riding on a trail and come across a closed gate. You're going to be back within a half an hour and don't see any livestock in sight so you leave the gate open and will close it on your way out.** (Bad idea - livestock could get out while you're gone and if you take longer to return or find another way out, the gate will be left open. Remember - Respect the Rights of Others!)
3. **While riding your ATV you come across a group riding horses. You pull to the side of the trail, turn off your ATV, take off your helmet and let the group pass.** (Good idea - unfamiliar activity may spook animals - causing injury to animals or people. Remember - Respect the Rights of Others!)
4. **Before your trip you get a map of the area and find out the rules and regulations of the public land you're visiting.** (Good idea - it's always a good idea to be prepared. Remember - Educate Yourself!)
5. **You just bought an ATV, you've ridden a dirt bike before so you don't take a skills class or read the owner's manual - how different can they be?** (Bad idea - dirt bikes and ATVs are different, you should always become familiar with your new equipment - which also means reading the owner's manual. Remember - Educate Yourself!)
6. **Lucky you! You found an awesome arrowhead on the trail. But instead of taking it home with you, you take a picture of it to help you always remember what you found.** (Good idea - You should never take home what you find. This includes any living or non-living things you encounter on the trail. Taking a picture is an awesome way to bring the object home with you. Remember - Avoid Sensitive Areas!)
7. **You're riding on a trail on the edge of a meadow, there's a lake in the middle you want to swim in. You figure if you ride your ATV in one way and out the same way, you won't cause much damage.** (Bad idea - riding in meadows not on designated trails can lead to resource damage which can lead to riding areas closing. Remember - Avoid Sensitive Areas!)
9. **After your ride you don't wash your ATV, you're going on another ride in a different area next weekend, it would just be a waste of time.** (Bad idea - not washing your equipment between rides can spread invasive species. Remember - Do Your Part!)

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<b>Up to 2 years</b>	<b>Banana Peel</b>	
<b>1 to 5 years</b>	<b>Cigarette Butt</b>	
<b>1 to 5 years</b>	<b>Wool Socks</b>	
<b>5 years</b>	<b>Plastic-coated Paper</b>	
<b>10 to 20 years</b>	<b>Plastic Bags</b>	
<b>50 years</b>	<b>Leather</b>	
<b>50 years</b>	<b>Steel Can</b>	
<b>450 years</b>	<b>Plastic Six-pack Holder</b>	
<b>500 years</b>	<b>Aluminum Can</b>	
<b>500 years</b>	<b>Disposable Diaper</b>	
<b>1,000,000 years</b>	<b>Glass Bottles</b>	

**Up to 2 years**

**Banana  
Peel**



**1 to 5 years**

**Cigarette  
Butt**



**1 to 5 years**

**Wool  
Socks**



**5 years**

**Plastic-  
coated  
Paper**



**10 to 20  
years**

**Plastic  
Bags**



# 50 years

# Leather



**50 years**

**Steel  
Can**



**450 years**

**Plastic Six-  
pack  
Holder**



**500 years**

**Aluminum**

**Can**



**500 years**

**Disposable  
Diaper**



**1,000,000  
years**

**Glass  
Bottles**

