

HAZARD

Volcano: Lava Flow

Lava is molten rock that flows across the ground. It burns everything it touches. Lava is mostly hazardous to the things we can't move out of the way.



Play this Mitigate card on this hazard:



HAZARD

Flood

Floods occur when large storms or melting ice create too much water. Floods can cause damage and are dangerous because the water can move very fast.



Play these Mitigate cards on this hazard:



HAZARD

Drought

Drought is a shortage of water over a long time. Droughts can last many years, make fires and dust storms worse, and cause crops to fail.



Play only WILD cards on this hazard

WILD



HAZARD

Wildfire

Wildfires are uncontrolled fires in forests or grasslands. They can be caused by lightning or by humans.



Play these Mitigate cards on this hazard:



HAZARD

Extreme Weather

Hurricanes, tornadoes, thunderstorms, and blizzards can be dangerous because of heavy rain, strong winds, lightning or white out and slippery surfaces.



Play these Mitigate cards on this hazard:



HAZARD

Earthquake

Earthquakes happen when rocks underground suddenly break and move, causing the ground to shake. They can cause tsunamis, landslides, or buildings to fall. Earthquakes happen without warning.



Play only WILD cards on this hazard

WILD



MITIGATE

Manage plants

Plants can stop dust from being kicked up and can help prevent landslides, but too many plants can fuel wildfires!



Play this card on any of these hazards:



MITIGATE

Sand Bags

Sand bags can prevent water from coming into buildings and can change the path of flood waters.



Play this card on this hazard:



MITIGATE

Put out the fire

Water and other materials can put fires out or prevent them from spreading.



Play this card on this hazard:



CHANCE

Friendly Neighbor

Getting to know our neighbors paid off: We worked together and found an answer!



To play this card:

1. Shake hands with all in your group.
2. Choose one Mitigate card from the discard pile and play it.



CHANCE

Climate Change

Climate change makes storms and floods stronger, droughts drier, and temperatures more extreme.



To play this card:

1. Silently act out one of these hazards so that your team can guess which:



2. If your team guesses, you only flip 1 of these hazards back over (your choice), if not, flip all back over.



MITIGATE

Emergency Kit

Better safe than sorry! It's always good to have an emergency kit prepared just in case!



Play this card on ANY hazard!

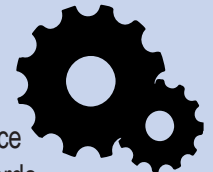
WILD



MITIGATE

Engineering

We can improve structures and create technology to prevent or reduce the impact of hazards.



Play this card on ANY hazard!

WILD



HAZARD

Dust Storm

On Mars, dust storms can cover the whole planet! Dust is bad to breathe and can damage equipment.



Play these Mitigate cards on this hazard:



HAZARD

Too hot/Too cold

When it is very hot or cold, wear the right clothes. In space, it can be extremely hot in the sunlight and very cold in shadows.



Play these Mitigate cards on this hazard:



HAZARD

Meteor Impact

Impacts are caused by pieces of rock or ice from space hitting the ground. They move very fast and can make craters.



Play these Mitigate cards on this hazard:



MITIGATE

Get out of there!

Evacuate! One of the best ways to stay safe is to get away from the hazard.



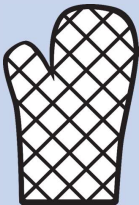
Play this card on any of these hazards:



MITIGATE

Thick clothes/walls

Insulation protects from extreme heat and cold. This could be warm clothes or the walls of a house, spacecraft, or spacesuits.



Play this card on this hazard:



MITIGATE

Training

Prepare for any hazard by getting an expert to show you what to do



Play this card on ANY hazard!

WILD



MITIGATE

Go Inside!

Finding the right type of shelter can help protect from a range of hazards, even a meteor if its underground.



Play this card on any of these hazards:



MITIGATE

Emergency Kit

Better safe than sorry! It's always good to have an emergency kit prepared just in case!



Play this card on ANY hazard!

WILD



MITIGATE

Filters

Filters are used in masks and vents to prevent us from breathing in dust. Special filters can also protect us from toxic gases.



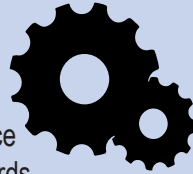
Play this card on any of these hazards



MITIGATE

Engineering

We can improve structures and create technology to prevent or reduce the impact of hazards.



Play this card on ANY hazard!

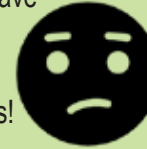
WILD



CHANCE

Not Prepared

Uh oh! We shouldn't have used those flashlights from our Emergency Kit for shadow puppets!



To play this card:

1. Everyone discards their wild cards from their hands
2. Everyone makes a sad sound effect (wah wah)



CHANCE

Research

Good work, we learned something new that can help!



To play this card:

1. Pretend your reading a book, point to it, and say Eureka!
2. Choose two mitigation cards from the discard pile and play 1.



CHANCE

Lose Power

Where did we put those candles...?



To play this card:

1. Remove 2 wild cards in play.
2. You must keep your eyes closed until your next turn.



CHANCE

Teamwork

Teamwork makes the dream work! We got this!



To play this card:

1. High-five everyone in the group.
2. Everyone plays one mitigate card immediately.



CHANCE

Early Warning

I hear sirens! It's the early warning system! Grab your emergency kit and get out!



To play this card:

1. Do your best siren impression.
2. Instantly turn over one hazard matched with "Get out of there!"



HAZARD

Low gravity

The human body works best in Earth's gravity. When we are weightless, our muscles and bones can lose strength.



Play these Mitigate cards on this hazard:



HAZARD

No Food/Water/Air

People need air with oxygen to breath, food to eat, and water to drink. In space, none of these are available.



Play these Mitigate cards on this hazard:



HAZARD

Space Radiation

Radiation is energy in waves or particles, like light. Some is safe, and some can be harmful. In space, astronauts can be hit with harmful radiation.



Play these Mitigate cards on this hazard:



HAZARD

Micro-impact

Tiny, fast-moving particles of rock, ice, or space junk can punch holes in spacesuits or spacecraft.



Play these Mitigate cards on this hazard:



HAZARD

Poison Soil

The soil on Mars contains toxic chemicals, but they can be converted into useful things like oxygen.



Play these Mitigate cards on this hazard:



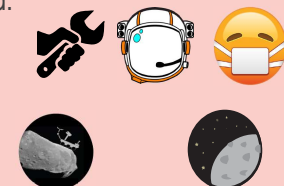
HAZARD

Scratchy Soil

On planetary surfaces, impacts blast rocks into a powder of glass and rock shards. This is bad to breathe and can damage robots or equipment.



Play these Mitigate cards on this hazard:



MITIGATE

Space Suit

Spacesuits are designed to protect astronauts from many hazards. Suitports are cool too! Ask your educator about them.



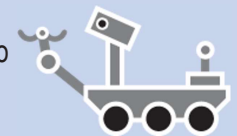
Play this card on any of these hazards



MITIGATE

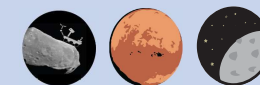
Use a Robot instead

No food? No water? No air? No problem! Send a robot instead.



Play this card on ANY hazard!

WILD



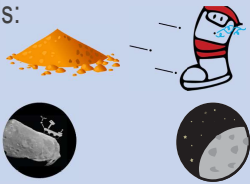
MITIGATE

Fix what is broken

Looks like the damage isn't too bad, we can fix this!



Play this card on any of these hazards:



MITIGATE

Vitamins

We get most vitamins from our food. In space, astronauts need to take extra vitamins to stay healthy and prevent bone loss.



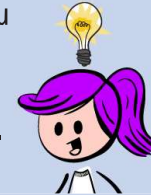
Play this card on any of these hazards:



MITIGATE

Use what is around

On other planets, you can use materials around you to make something you need.



Play this card on any of these hazards:



MITIGATE

Use it again!

Instead of bringing or making more water or air, we can filter and reuse what we have.



Play this card on any of these hazards:



MITIGATE

Grow Plants

Plants aren't just a source of food, they provide oxygen to breathe and important nutrients. Astronauts can grow plants in space.



Play this card on any of these hazards:



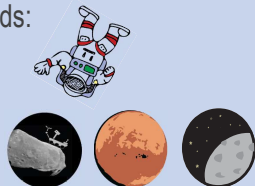
MITIGATE

Exercise

Astronauts have to exercise more than normal to prevent bone and muscle loss in low gravity.



Play this card on any of these hazards:



MITIGATE

Shielding

Suits and structures are made so that they block more harmful radiation. Special shielding can also block micro-impacts.



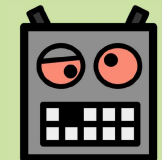
Play this card on any of these hazards:



CHANCE

Broken Robot

The robot's arm isn't moving! That's going to make things more difficult!



To play this card:

1. You must keep one arm perfectly still in front of you until your next turn.
2. Remove one mitigate from 2 hazards in play.



CHANCE

Lose Communication

Houston? Come in? It seems we've lost the connection with Earth.



To play this card:

1. Remove one mitigate from 2 hazards in play.
2. No one can speak until it is your turn again.



Player 4 cards

Matching Mitigate 2	Matching Mitigate 1
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Page 8 (top left) *Optional*

Matching Mitigate 2	Matching Mitigate 2	Matching Mitigate 2
Matching Mitigate 1	Matching Mitigate 1	Matching Mitigate 1

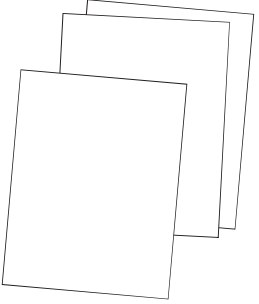
Page 5 (top)

Matching Mitigate 2	Matching Mitigate 1
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Page 9 (top right) *Optional*

Player 1 cards

Discard Pile



Possible Hazard 10	Possible Hazard 9
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Page 4 (left)

Hazard 4	Hazard 5	Hazard 6
Hazard 1	Hazard 2	Hazard 3

Page 1 (center)

Possible Hazard 7	Possible Hazard 8
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Page 2 (right)



Draw Pile

Player 3 cards

Matching Mitigate 1	Matching Mitigate 2
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Page 7 (lower left) *Optional*

Matching Mitigate 1	Matching Mitigate 1	Matching Mitigate 1
Matching Mitigate 2	Matching Mitigate 2	Matching Mitigate 2

Page 3 (bottom)

Matching Mitigate 1	Matching Mitigate 2
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Page 6 (lower right) *Optional*

Player 2 cards

Hazard 4

Hazard 5

Hazard 6

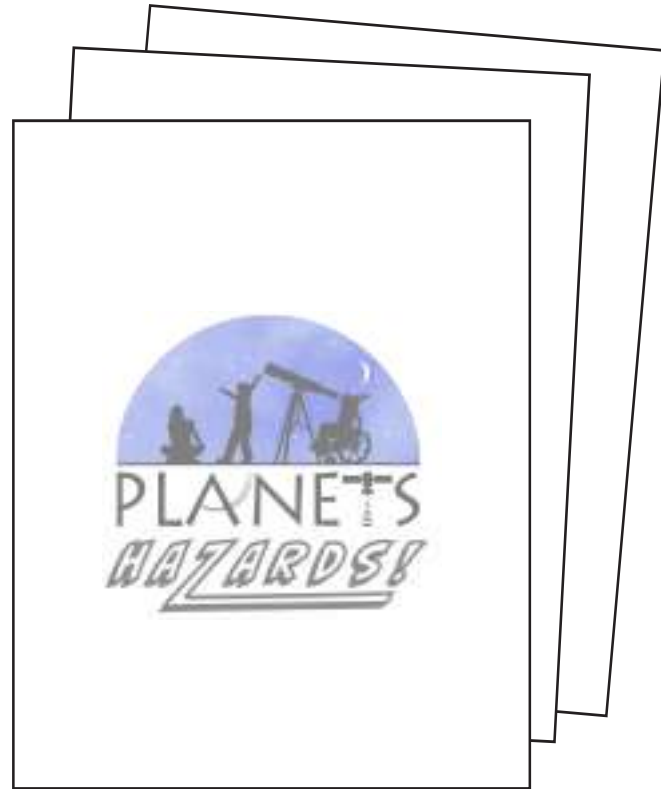
Hazard 1

Hazard 2

Hazard 3

Possible
Hazard 7

Possible
Hazard 8



Draw Pile

Matching
Mitigate
1

Matching
Mitigate
1

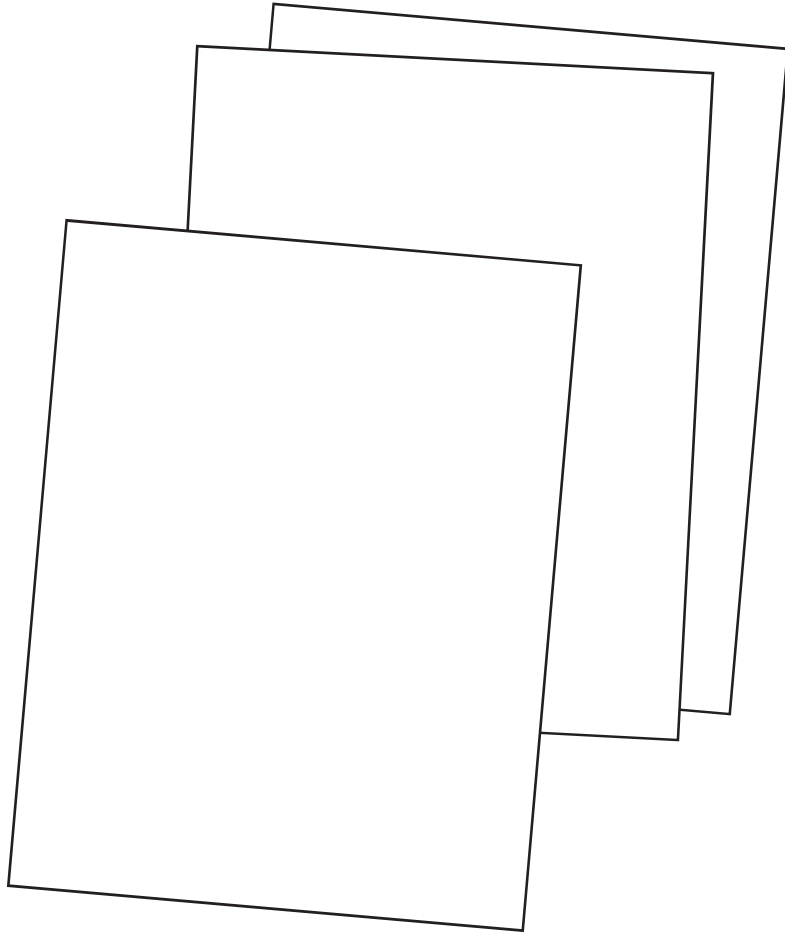
Matching
Mitigate
1

Matching
Mitigate
2

Matching
Mitigate
2

Matching
Mitigate
2

Discard Pile



Possible
Hazard 10

Possible
Hazard 9

Matching
Mitigate
2

Matching
Mitigate
2

Matching
Mitigate
2

Matching
Mitigate
1

Matching
Mitigate
1

Matching
Mitigate
1

Matching
Mitigate
1

Matching
Mitigate
2

Player 2 cards

Player 3 cards

Matching
Mitigate
1

Matching
Mitigate
2

Player 4 cards

Matching
Mitigate
2

Matching
Mitigate
1

Matching
Mitigate
2

Matching
Mitigate
1

Player 1 cards