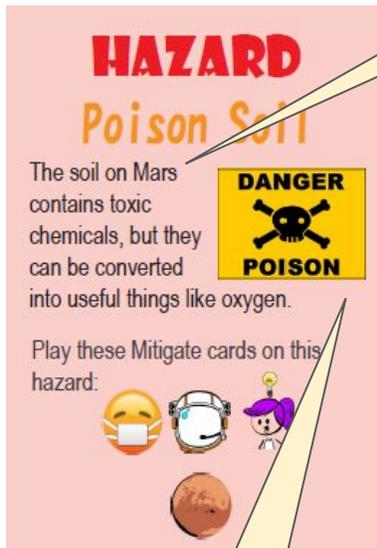
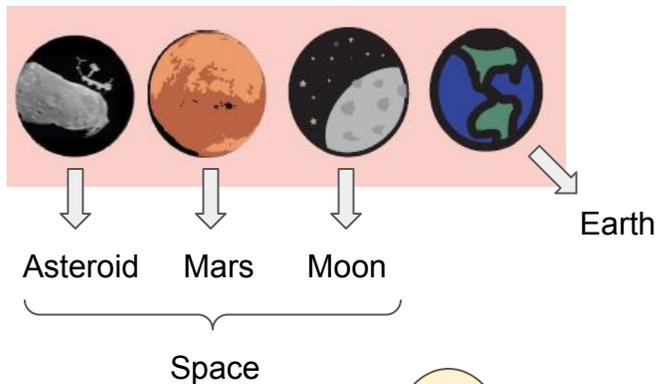


Get excited! This game is about how NASA keeps astronauts and robots safe in space.

First, sort the cards into 3 piles

1. 14 everyday cards
2. 28 Earth cards (ANY)
3. 19 space cards (ONLY)



Fun facts!

Match the pictures!

Follow the card

Level 1 - Everyday Hazards

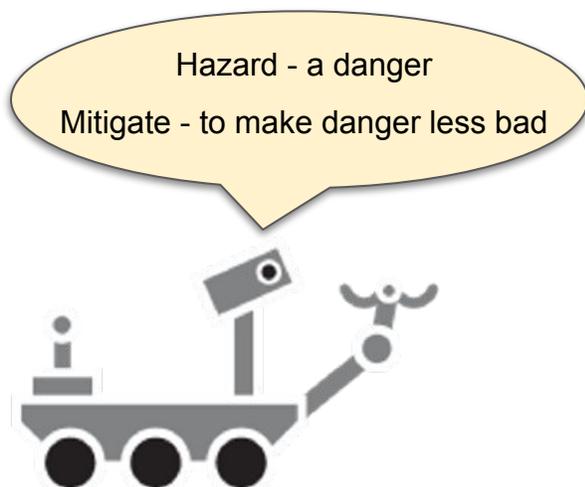
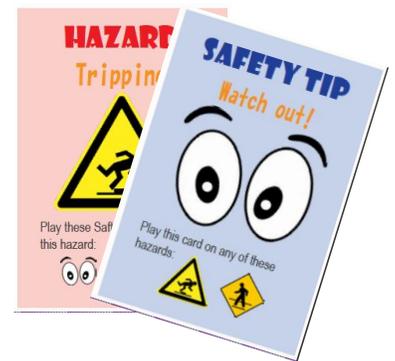
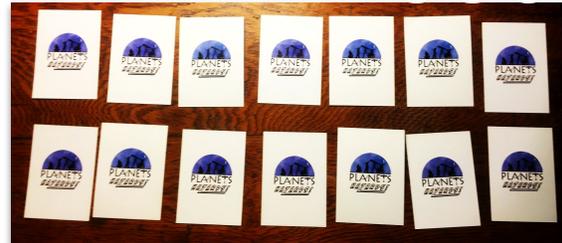
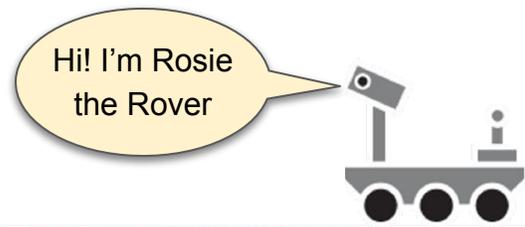
1-2 player Matching Game

What you need:

- ★ 14 everyday hazards cards

Game Play Instructions

- ★ Mix up the cards
- ★ Lay out all 14 cards face-down
- ★ Flip over two at a time
- ★ The goal is to match each **Safety Tip** card to a **Hazard** card with the same picture.
- ★ Place matches face-up off to the side
- ★ When you have found all the **Hazard** cards, match a second **Safety Tip** to each hazard until you run out of cards.



HAZARD

Look around your house for a hazard

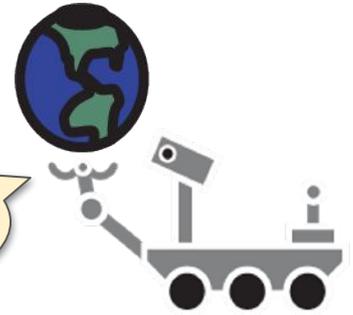
On the blank red card, write it & draw a picture

Match it to a "Safety Tip" card, or create your own

Show your family or post it using #PlanetsSTEM

Level 2 - Mitigate Earth Hazards

1-4 Player Card Game



What you need:

- ★ 28 Earth hazard cards

Game Set Up (1-4 players)

- ★ Sort the cards by color: red Hazard, blue Mitigate, & green Chance
- ★ Unfold your game board
- ★ Place 6 Hazard cards face-up in their places on the game board
- ★ Deal each player 2 Mitigate cards
- ★ Mix up the rest of the cards and put them face-down in the "Draw Pile"

Game play

- ★ **Goal: Everyone works together to mitigate all Hazards**
- ★ Play 1 Mitigate on the game board below any matching Hazard then draw a card to end your turn. **You should always at least 2 cards.**
- ★ On your next turn:
 - If you draw a Hazard card:
 - Place it face-up on the game board, draw a new card, and then...
 - If you have 2 Mitigate cards:
 - Play 1 Mitigate on a matching Hazard, and draw to end your turn. If you can't play either, discard both & draw 2 cards to end your turn.
 - If you have a Chance card:
 - Do what the card says, discard it, and draw to end your turn
- ★ If a Hazard is matched with 2 Mitigate cards, flip the Hazard over and put the Mitigate cards in the discard pile.
- ★ If the draw pile runs out, mix up the discard pile and return them to the draw pile
- ★ **Once all Hazards are mitigated (flipped over), everyone wins!**

If playing solo:

- ★ Take out all the chance cards
- ★ Keeping drawing & adding to your hand until you get a card you can play

MITIGATE

Look around your house for ways to mitigate a natural hazard

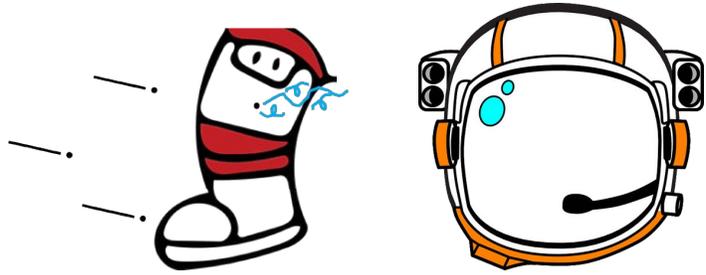


On the blank blue card, write it & draw a picture



Show your family or post it using #PlanetsSTEM

Level 3 - Space Hazards 1-4 Player Card Game



What you need:

- ★ 36 Space Hazards cards:
 - ★ Set aside 11 cards that have only the Earth picture 
 - ★ Add the 17 cards with Earth and space pictures to the deck of 19 cards with only space pictures



Game Set Up (1-4 players)

- ★ Play this level with the **green Chance** cards
- ★ Set up the game in the exact same way as Level 2.

Game play

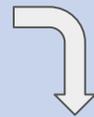
- ★ Play the exact same way as Level 2, but with these new cards.
- ★ Refer back to the rules on Level 2 for reminders
- ★ If there is a Mitigate card that doesn't match a Hazard, but you can explain why it should, you can play it!

Have a question?
Ask a planetary scientist at
www.planets-stem.org/planets-at-home/
We will answer them live on social
media every Wednesday.



MITIGATE

What are some other ways
you could mitigate Space
Hazards?



On the blank blue card,
write it & draw a picture



Show your family or
post it using #PlanetsSTEM

BONUS Level - Want to mitigate a hazard for real? Work together as a family to engineer a solution!

How can we engineer something that would mitigate germs for real?

Let's try a face mask! 🧐

What materials do you need? Talk with your family about what to use.

What your mask needs to do:

- ★ Cover your nose and mouth
- ★ You need to be able to breathe
- ★ Not use tape, glue, or staples

Engineer it!

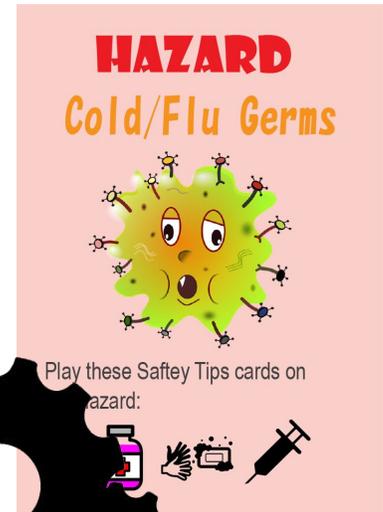
- ★ Try drawing your plan on the back of this page
- ★ Assemble your mask & attach the strings

Test

- ★ Shake your head. Does it fall off or fall apart?
- ★ Notice how it feels. Does it hurt? Does it cover your nose & mouth?

Improve

- ★ If your mask didn't pass the tests, that's okay! Engineers love it when their designs fail because that's how they learn and improve!
- ★ Talk to your family about how to improve your mask.



Hmm... old t-shirts, coffee filters, yarn, rubberbands...



Wow, you engineered a facemask! Show it off or post a picture #PlanetsSTEM

