Speak Agent™

THE MISADVENTURES OF MS. HAPP PAGE 1

MATH 7

Danger follows Ms. Happ wherever she goes.
What are her chances of avoiding ALL of the mishaps on her misadventures?

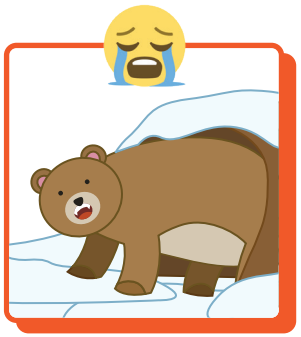
Ms. Happ's Possible Mishaps

SAFE: 98%

ERUPTION: 2%

- Ms. Happ hikes up a mountain. The mountain has an active volcano. There is a 2% chance it will erupt.

SAFE: 95%



WAKES UP: 5%

- Ms. Happ camps near a cave. A bear is hibernating for the winter. There is a 5% it will wake up and chase Ms. Happ down the mountain.

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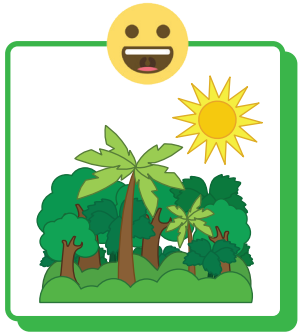
THE MISADVENTURES OF MS. HAPP PAGE 2

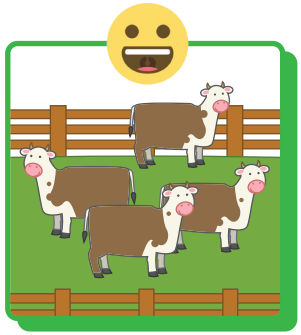
MATH 7



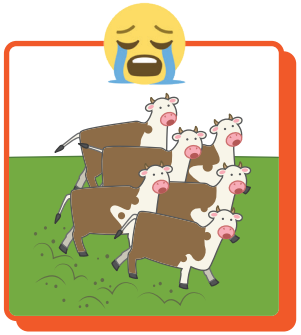
SAFE: 88%

DOWNPOUR: 12%

- Ms. Happ treks in a jungle. It is the wet season. There is a 12% probability that she will get soaked by torrential rains.

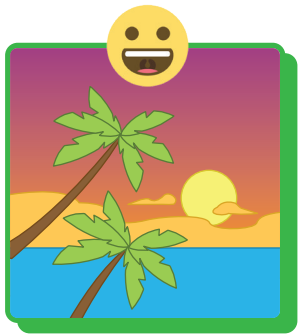


SAFE: 79%

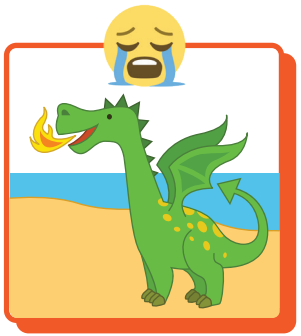


STAMPEDE: 21%

- Ms. Happ visits a ranch. The cattle are restless. There is a 21% chance the cattle will stampede.



SAFE: 100%

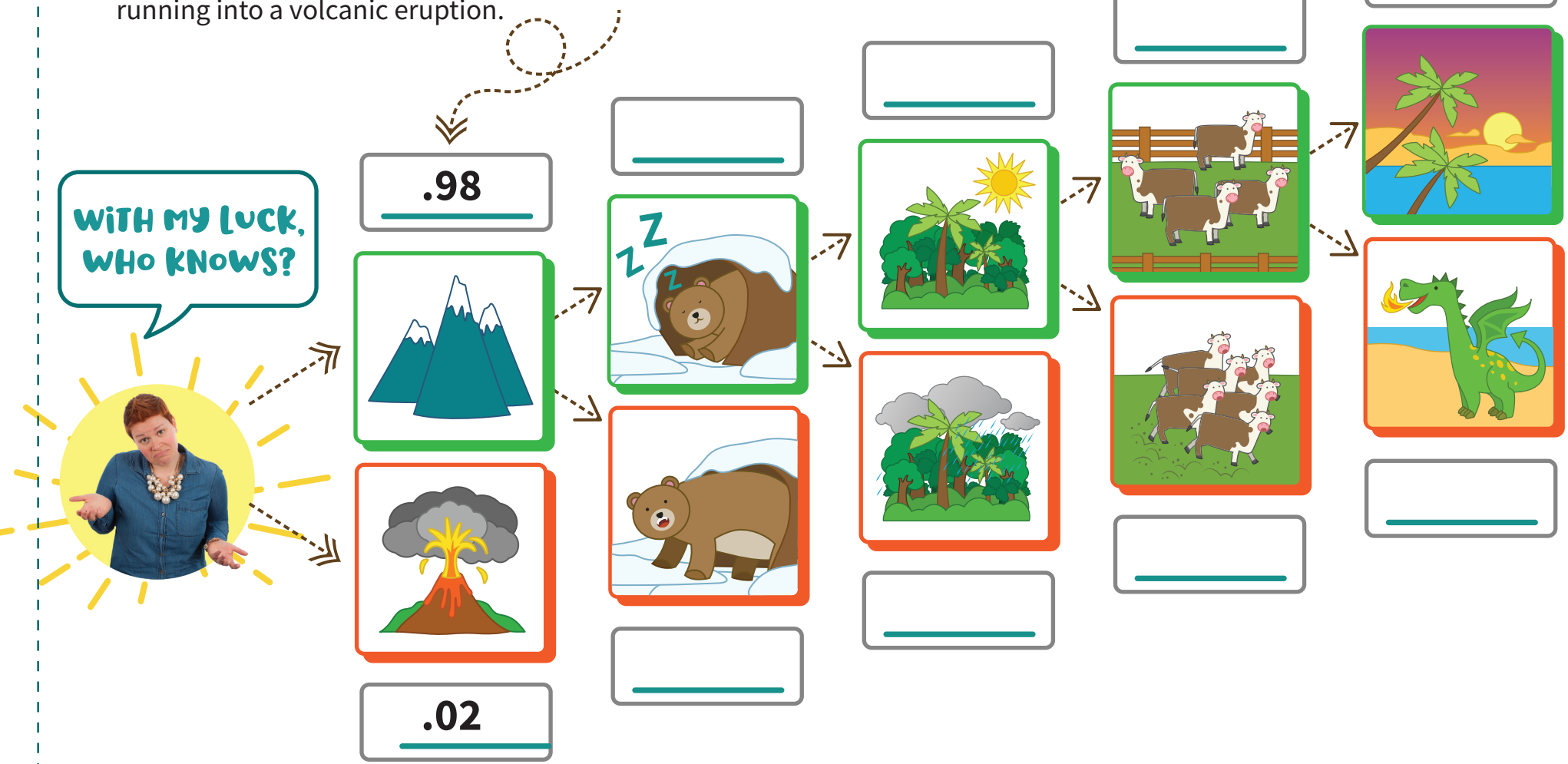


DRAGON RAID: 0%

- Ms. Happ visits Paradise Island. There are never any mishaps on Paradise Island. There is a 0% chance that fire-breathing dragons will attack the island. Okay, we *think* it's 0%.

1 ADD PROBABILITIES

Fill in all the probabilities on the probability tree. For example, there is a 98% chance of Ms. Happ safely climbing the mountain vs. a 2% chance of running into a volcanic eruption.



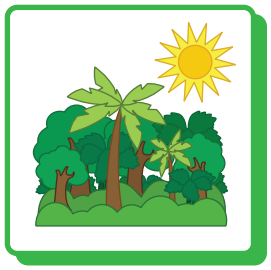
2 CALCULATE

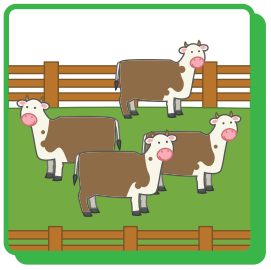
▶ Find the product of the "safe" probabilities.
That's the chance of zero mishaps.

Round your answer to two decimals like **.75**, for example.

Calculate Safe Probabilities:

.98 × ____ × ____ × ____ × ____ = ____





3 CHECK YOUR ANSWER

▶ Go to this webpage: **speakagent.com/pgcps-parents**
Look for the link called "Answer Key."

BONUS QUESTION

What is the probability that all five (5/5) mishaps will happen?

LEARNING GOALS

- ☐ Learn that the probability of a compound event is the fraction of outcomes.
- ☐ Represent this using a tree diagram.

UNIT: Probability