

# Groundhog Day Shadows

Every year on February 2nd we celebrate Groundhog Day. On this day, we check with a groundhog to see if we will have six more weeks of winter or if spring will come early. Sounds silly, right? While there is no supporting science behind Groundhog Day, it is still fun to play along and make your own hypothesis, or guess, about the weather.

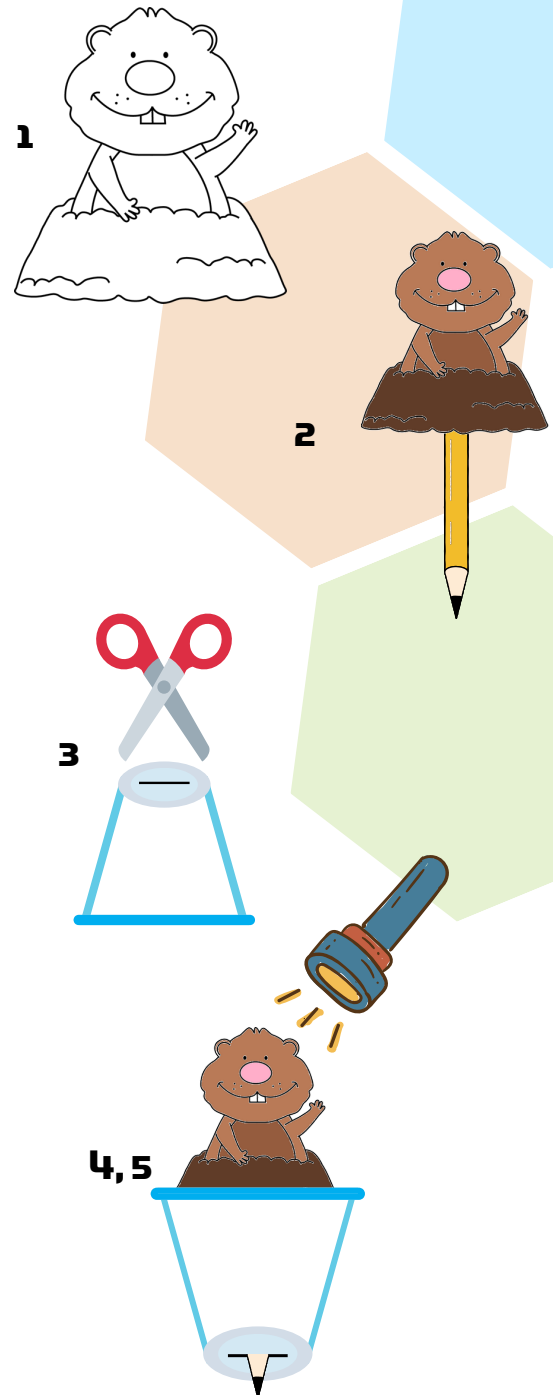


## Materials:

- Paper
- Paper Cup
- Scissors
- Coloring Supplies
- Tape
- Flashlight
- Pencil

## Procedure:

1. Draw or print out a groundhog like the one here, then cut it out and color it! (You can print the last page for this groundhog)
2. Tape your colored groundhog to your pencil.
3. Cut a hole in the bottom of your paper cup for the pencil to fit through. Slide your groundhog into the paper cup. You may have to roll your groundhog a little bit if the cup is smaller than your groundhog.
4. Now, you can pop your groundhog out of its burrow!
5. When your groundhog is out, use your flashlight and shine it around your groundhog. Does it see its shadow or not? What is your hypothesis about our weather – will we have six more weeks of winter or will spring come early?



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## WHAT'S HAPPENING?

2020 marked the 20th time the groundhog had not seen their shadow, calling for an early spring, but since 1887 the groundhog has seen their shadow 107 times. While the groundhog's predictions are not always right, they make a hypothesis based on their surroundings just like a scientist!

Punxsutawney Phil vs. the U.S. National Temperature				
	SHADOW	TEMPERATURE DEPARTURES		DID PHIL GET IT RIGHT?
		February	March	
2023	✓	☀	❄	✗
2022	✓	❄	☀	✗
2021	✓	❄	☀	✗
2020	✗	☀	☀	✓
2019	✗	❄	❄	✗
2018	✓	☀	☀	✗
2017	✓	☀	☀	✗
2016	✗	☀	☀	✓
2015	✓	❄	☀	✗
2014	✓	❄	❄	✓

❄ Below   ❄ Slightly Below   ☀ Slightly Above   ☀ Above

**30%** In the past 10 years, Phil has been **RIGHT 30%** of the time.

Source: [www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/](http://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/)



## DID YOU KNOW?

**Punxsutawney Phil** is from Punxsutawney Pennsylvania and is cared for by the Punxsutawney Groundhog Club. The club was formed in 1887 and have a record of every Groundhog Day since 1886!



The Punxsutawney  
Groundhog Club  
Est. 1887

You can check them out  
at [groundhog.org](http://groundhog.org).

