# Why tornadoes?

On June 1, 2011, when I was in preschool, a tornado hit West Springfield.

That day, we stayed safe in our basement. Others weren't so lucky.

We gave a donation of toys to a family who lost everything.

Ever since then, I've read books and watched videos of tornadoes.



Photo: WWLP - Channel 22

## Question

How does a tornado move things?

**Background:** What is a tornado?

A tornado is severe windstorm. It has a big spinning funnel. It reaches from a big cloud in the sky all the way to the ground.

#### What I knew

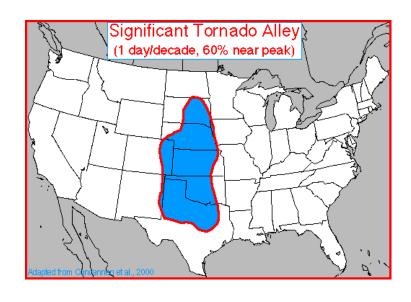


Photo: ncdc.noaa.gov

- Tornadoes form when hot and cold air meet.
- They have a stronger wind than just a snow storm.
- Tornadoes don't usually happen in Massachusetts.
- They happen in Tornado Alley: Texas, Oklahoma, Nebraska, Kansas, South Dakota

# My Research

### Tornado in a Jar

To make the tornado, we:

- Put water in the jar
- Added green dye
- Added two beads
- Spun it counterclockwise



#### Results



- The water spun fast.
- It formed a funnel in the jar.
- The funnel picked up the beads and spun them in a circle.
- It dropped off the beads in a different spot.

#### **Staying Safe During a Tornado**

- If you are inside, stay in the basement or a windowless room.
- If you are outside, go to a ditch by the side of the road.
- Listen to tornado watches and warnings.



Photo: blog.nationalstormshelter.com

#### Conclusion

When the funnel was half way to the bottom of the jar, the beads started flying around in a circle and they landed in a different spot. If I spun the jar faster, the funnel would reach the bottom of the jar and move the beads farther.

Tornados can go from EF-0 to EF-5. The bigger the number, the more damage they do. The wind will move things farther in an EF-5 tornado than in an EF-0.

## References

To do this project, I read these books:

- Do Tornadoes Really Twist by Melvin and Gilda Berger
- Tornado Alert by Wendy Scavuzzo
- Inside tornadoes by Mary Kay Carson

And I looked at these websites:

www.pebblego.com www.wwlp.com www.noaa.gov