10% Of A Balloon

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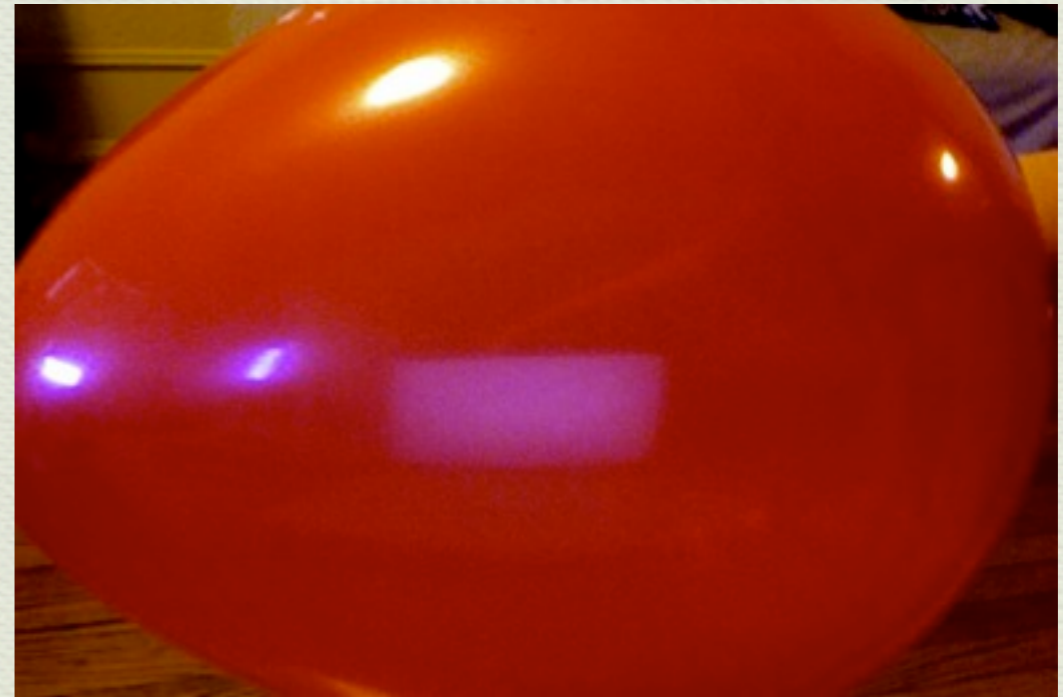
What's and Why's

- Applying pressure to the balloon until it pops.

- Finding out how much weight can a balloon withstand!

- Dislike for loud noises (Like balloons popping, not explosions, they are cool!)

Test One Balloon Information

- 33 cm height.

- 23 cm width.

- Ordinary "Happy Birthday" Balloon.

What experiment?

- Apply pressure on the top of the balloon

- SAT books = 1.5 kg (~15n, exactly 14.715n)

- Force applied from top, exactly the same force applied from bottom.

First Experiment

- First weight: 1.5 kg – not enough

- Second weight: 3 kg – not enough

- Third weight: 4.5 kg – not enough, balloon flew out.

- Fourth weight: 5.5 kg – not enough!

- Fifth weight: 7.7 kg –Not enough

- Sixth weight: 9.9 kg – Not enough

- Seventh weight 18.45 kg – Not enough

- Eighth weight: 23.5 kg Balloon popped.

Test Two Balloon Information

- 42 cm height

- 30 cm width

- Ordinary "Happy Birthday" Balloon, but bigger.

Second Experiment

- First weight: 5.5 kg not enough

- Second weight: 9.9 kg not enough

- Third weight: 15.3 kg Balloon popped.

Conclusion

- The more volume, the easier to pop.

Explanation (if larger then...)

- Less space for air to travel.

- More air inside.
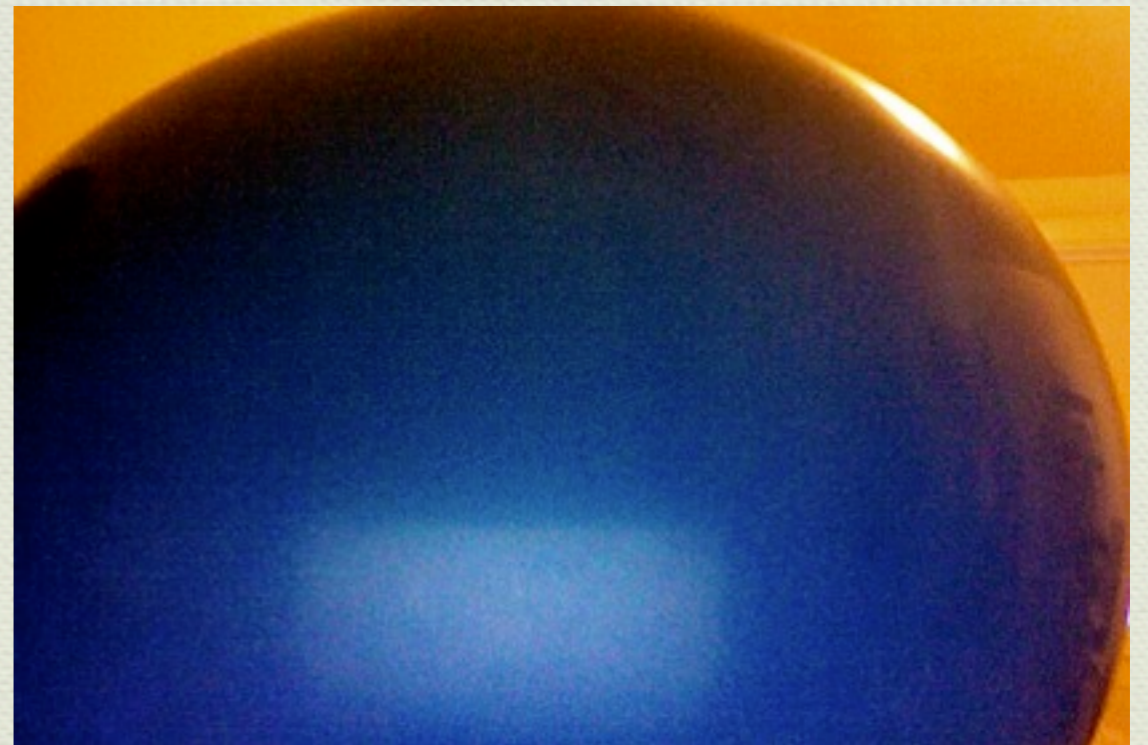
- Material (rubber) more stretched, thus thinner.

The secret test/Future conciderations (more data required for calculations)

- Same balloon statistics as in dataset one.

- Mass dropped from a height.

- 1m height.

- Mass: 5.5 kg.

- Time?

- Balloon pops (more then 230n, but less then 500 n)

The hero balloon!

- This balloon survived me stepping on it, with full force +weight of my leg 7 times.

- 29 cm height

- 20 cm width

- Give him a round of applause.

The end

* More?