Post-Show **Discussion Topics**

Use the following questions for classroom discussion after attending The Science of Magic:

• How do magicians create magic tricks?

They use the steps of the scientific method. They develop a theory (hypothesis) then they test it. If it fails they change one variable and test it again. They repeat this process over and over until they get their theory to work.

Do magic tricks always work?

No. Just like scientists, magicians must keep experimenting to find ways to make illusions work. Some ideas NEVER work and others take YEARS to create!

• How do magicians use mirrors to make magic?

They use mirrors to reflect light to make a person think they are seeing something (a mirror image) that is not really there.

- What type of mirror did Bill use to make things disappear in the magic box?

 Plane mirror
- Can a solid pass through a solid?

No. When molecules are tightly packed together they form a solid. In a solid the molecules can't move or separate in order to allow another solid to pass through.

• Since a solid can't scientifically pass through another solid, how did Bill pass the metal hoop over the floating teacher?

We can't tell you the secret but here's a tip...misdirection and controlled perspective :-)

What can you do with an object when you find its center of gravity?

Make it balance

 After everything Bill taught us during the show do you think (teacher's name) was really floating in mid-air at the end of the show?

Mention the passing of the metal hoop as proof of no supports, etc. Use this question to spawn creative methods of how the teacher was floating.



Create experiments to test the student's hypotheses on how they think the teacher floated. Were their hypotheses correct?
Why or why not?