P3
Here is an example from the Carlos Museum of an object that was mounted for display using hidden magnets!

P4
This paper map is another example of an object that can be displayed using magnets.

P5
Magnets can also be used to hold pieces of an object together during repair, as seen with the ceramic vessel here. Magnets were placed on the inside and outside of the object to hold the break in alignment. Would you use the same magnet used to display the paper map to hold ceramic pieces in place? Why or why not?

P6
Changing the thickness between magnet and surface. Keeping the type of magnet and magnetic surface (this can be a changing variable too or the teacher can choose to have students use the same surface) constant as well as the weight of the object. Weight attached to the packets just measures the strength of the system. Image shows two different paper packets being tested on the same metal door with the same type of magnet.

P13
Let's graph our class data together. Choose one volunteer from your group to come to the board and graph your group's data. Have students use different colored markers or a different symbol to represent their ferromagnetic surface.

P14
Type of strengths (tensile, shear, compressive etc.) Important for conservation research, finding the right adhesives for treatment. Which mechanical strength looks most similar to our experiment set up? (Tricky, compressive strength of magnetic system)

P16
Examples of research done for conservation purposes; Masters thesis testing adhesives with coconut shell testing the tensile strength of adhesive. This helps conservators to choose appropriate adhesives for different materials. In this case, it was finding the best adhesive for coconut shell.

P17
Materials scientists can design machines to test adhesive and material strength for conservation and industry use. Here is an example of of an Emory student's honor's thesis research. She designed a conservation adhesive tensile to shear tester to test the strength of different mixtures of adhesive with added fumed silica powder. Glued samples are hung in the machine and have weight attached to the bottom under the join breaks. The top piece spins so shear and tensile strength can be tested.