



Middle School Post EMS Activity

The EMR Pasta post EMS activity is an excellent tool to assess student understanding of the distortions contained within models in general, and the electromagnetic spectrum in particular. Students construct their own version of the electromagnetic spectrum using a variety of pasta shapes, and then present their models and provide an explanation of how their pasta analogy/model does and does not represent the electromagnetic spectrum.

The [Frequency and Wavelength demonstration](#) included with the EMR Pasta activity uses a pasta machine. This demonstration will help students understand that electromagnetic radiation is all the same thing. Only the shape is different. It is a common misconception that since we can see the visible spectrum, and hear parts of the radio spectrum, and get sunburned by part of the UV spectrum that the different bands are not really related to each other.

This activity requires the students to gather information and construct presentations.