


## Model Organisms pre-class activity: Huntington disease

### Directions

1.  Go to the web site *Your Genes, Your Health* ([www.ygyh.org](http://www.ygyh.org)).
2. Click on "Huntington disease" and roll over the icons on the first page to review the information.
3. Work through the animations in "What causes Huntington disease?" and "How is it inherited?"
4. Answer the following questions.

### Questions

1. What is the difference between a "normal" *huntingtin* gene and a gene that has the Huntington mutation?
2. What is the number of repeats in a *huntingtin* gene related to?
3. How does an excess number of repeats affect the protein created by this gene?
4. Explain how a child can inherit Huntington disease.
5. How could a child whose biological parents don't have Huntington disease go on to develop this disorder?
6. (a) Draw a Punnett square showing a cross between a normal mother and Huntington's father. What is the chance (in percent) that their child will inherit the disease?

