A 20.0kg chandelier is suspended from a ceiling with a cable that is 6.00m long. What is the period of oscillation as it swings?

A pendulum oscillates 24.0 times per minute in a particular location. If the pendulum is 1.53m long, what is the acceleration due to gravity at this location?

A spring has a 2.00s period of oscillation when a 20.0N weight is suspended from it. Find the period of oscillation of this spring if a 50.0N weight is suspended from it.

**EXTRA CREDIT**
A 5.00kg object is dropped from a height of 2.00m on to a spring sitting vertically. If the spring is compressed by a total of 40.0cm, what is the spring constant for this spring? (To get the extra credit points you must do this in one calculation!)