

Project Design Form

Name(s): _____ Date: _____

Model name: _____

As you create a computer model of a scientific phenomenon, use this form to help you organize your thoughts and develop the model from start to finish.

PROJECT DESCRIPTION

What question do you seek to answer?

What observation of phenomenon, model, or unexpected result led you to this question?

MODEL DESCRIPTION

What will be modeled?

What question do you seek to answer?

How will it be modeled? What abstractions are used?

Who are the Agents? What is the Environment? What are the Interactions?

How much time will the main forever loop represent? (minutes? days? months? years?)

What are the parameters of interest?

EXPERIMENTAL DESIGN**Variables**

What are the dependent and independent variables in your experiment?

Range

What is the range of values you will use for each variable?

Trials

How many trials will you run at each setting? Why?

Data Collection

What data will you collect?

Prediction

What effect do you think your variables will have on the model?

Data Analysis

How will you analyze your data?

Interpretation

How does the analysis of your data help you answer your question?

Going further

If you had more time, what further changes would you make to your model?