

# Introduction to Agent-Based Modeling (Summer 2023)

## 4.6 Unit 4 Overview » Unit 4 Test

---

### Question 1

What are the two core ideas of the ABM Design Principle?

- A. Focus on the question at hand and realism
  - B. Simplicity and Focus on the Question at hand
  - C. Simplicity and realism
  - D. Realism and any elements desired by the stakeholders
- 

### Question 2

What are the two major forces in the Bas model?

- A. innovation and imitation
  - B. imitation and social networks
  - C. innovation and advertising
  - D. advertising and creativity
- 

### Question 3

Which of these is not a design choice of agent-based modeling?

- A. Determining agent types
  - B. Determining agent properties
  - C. Determining inputs to a model
  - D. All of these are design choices for agent-based models
- 

### Question 4

In the diffusion model, what are the behaviors of the agents?

- A. determine the optimal behavior of diffusion
  - B. move, eat, reproduce
  - C. decide whether or not to adopt the information / innovation
  - D. decide who to talk to
- 

### Question 5

Nearly every SETUP procedure in NetLogo starts with what command?

- A. CLEAR-ALL
- B. RESET-TICKS
- C. TICK
- D. END

---

**Question 6**

What is the basic command used to plot the number of adopters over time?

- A. PLOT COUNT TURTLES WITH [ ADOPTED? ]
  - B. PLOT COUNT TURTLES
  - C. PLOT COUNT ADOPTED
  - D. PLOT TURTLES WITH [ ADOPTED? ]
- 

**Question 7**

In what kind of environment do agents operate in the DIFFUSION model?

- A. a social network
  - B. a GIS network
  - C. a lattice
  - D. a featurespace
- 

**Question 8**

What is the extension that we use in this model?

- A. nw
  - B. small-world
  - C. preferential-attachment
  - D. networkx
- 

**Question 9**

Why do we run each model multiple times in agent-based modeling?

- A. the models are often deterministic, and multiple runs help us determine their behavior
  - B. the models are often stochastic, and multiple runs help us understand the variance
  - C. you do not need multiple runs
  - D. BehaviorSpace requires multiple runs
- 

**Question 10**

What command in R is used to read the output of BehaviorSpace?

- A. read.netlogo
- B. read.data
- C. import.csv
- D. read.csv