

Team Name: _____ Team Number: _____ Total: _____

Game On - THEME: Marine Biology

Rubric (Reformatted for Clarity)

I. Game Mechanics (Up to 51 Points).

A. Target Audience Defined and Game Design Appropriately Targeted (1 Point)

1. Target Audience Not Defined = 0 points
2. Target Audience Defined = 1 point

B. Introduction (4 Points)

1. Game Title _____

- a) Game title not present = 0 points.
- b) Game title present = 1 point.
- c) Game title conveys the idea of the game = 1 point.

2. Buttons/Keys used to access other screens/options. _____

- a) No alternative screens/options available = 0 points.
- b) Buttons/keys to access other screens not available = 0 points.
- c) Buttons/keys to access other screens present = 1 point.
- d) Buttons/Keys successful in accessing other screens/options = 1 point.

C. Help/Instructions (6 Points)

1. Game Objective Stated _____

- a) Instructions not available = 0 points
- b) Instructions available = 1 point.
- c) Instructions provide clarity to the user = 1 point.

2. Movement Controls Explained _____

- a) Instructions not available = 0 points
- b) Instructions available = 1 point.
- c) Instructions provide clarity to the user = 1 point.

3. Scoring Explained _____

- a) Instruction not available = 0 points.
- b) Instruction available = 1 point.
- c) Instruction provides clarity to the user = 1 point.

D. User Controlled (UC) Sprite (6 Points)

1. Movement Complexity _____

- a) Sprite does not move = 0 points
- b) Sprite moves = 0.5 points.
- c) Sprite movement is smooth given gameplay = 0.5 points
(1) Given Gameplay = Up, Down, Diagonal, etc.
- d) User Controlled Sprite is present = 1 point.

2. Speed is Appropriate _____

- a) Speed is inappropriate for game = 0 points.
- b) Speed is appropriate given gameplay = 1 point.
(1) Given Gameplay = Not too fast, not too slow.
- c) Sprite can be controlled easily under the set speed = 1 point.

3. Sprite Orientation _____

- a) No Sprite = 0 points.
- b) Character faces appropriate direction = 1 point.
- c) Character returns to the original position or holds position given gameplay = 1 point.

- (1) Does the character restart at same spot? Does the character shift when it is supposed to be still?

E. Autonomous Sprites (6 Points)

1. Movement Complexity _____

- a) Sprites do not move given gameplay = 0 points.
(1) If sprites are supposed to move then they should.
- b) Sprites move when appropriate = 0.5 points
- c) Sprite movement is smooth given gameplay = 0.5 points.
(1) See UC movement complexity.
- d) Autonomous sprites present = 1 point.

2. Speed is Appropriate _____

- a) Speed is inappropriate for game = 0 points.
- b) Speed is appropriate given gameplay = 2 point.
(1) See UC sprite "Speed is Appropriate".

3. Sprite Orientation _____

- a) Sprite faces appropriate direction = 1 point.
- b) Sprite returns to original position or holds position given gameplay = 1 point.
(1) See UC Sprite "Sprite Orientation".

F. Collision Management (6 Points)

1. Sprite Interactions _____

- a) Sprites unable to interact with each other = 0 points
- b) Interaction appropriate given rules and gameplay = 2 points.

2. Environment Interactions _____

- a) Sprites unable to interact with environment = 0 points.
- b) Interaction is appropriate given rules and gameplay = 2 points.

3. Appropriate Interaction for Theme _____

- a) No Interaction = 0 points.
- b) Interactions do not make sense given theme = 0 points.
- c) Interactions make sense given theme = 2 points.

G. Score Keeping (6 Points)

1. Functions Properly in Game _____

- a) Scoring not available = 0 points.
- b) Scoring adds up instantaneously = 1 point.
- c) Scoring adds/deducts correctly = 1 point.

2. Scoring Appears on Screen _____

- a) Scoring does not appear on screen = 0 points.
- b) Scoring appears on screen = 2 points.

3. Scoring is Appropriate for Gameplay _____

- a) Scoring not in game rules = 0 points.
- b) Scoring follows criteria set in game rules = 2 points.

H. Debriefing (6 Points)

1. Clear Outcome of Game and Gameplay Stops _____

- a) Game does not have an end = 0 points.
- b) Image/Screen pops up indicating the end of the game = 1 point.
- c) Game provides you with a stated final score = 0.5 points.
- d) Game lets you know if you have won or lost = 0.5 points.

2. Items Remaining on Screen are Appropriate. _____

- a) Items remaining are not appropriate given gameplay = 0 points.

- b) Items remaining are appropriate given gameplay = 2 points.
 - (1) Given Gameplay: Are sprites/items that have disappeared reappearing? Are the sprites supposed to be there at the end of the game?

3. How to Replay/Start Over Present. _____

- a) No option to replay/start over = 0 points.
- b) Option to replay/start over present = 1 point.
- c) Option to replay/start over works = 1 point.

I. Documentation (4 Points)

1. Coding Comments Included. _____

- a) No comments included = 0 points.
- b) Comments included = 2 points.

2. Main Sections of Coding Explained. _____

- a) No comments included = 0 points.
- b) Main sections of coding not explained = 0 points.
- c) Everything is commented = 1 point.
- d) Code function is explained clearly in comments = 1 point.

J. Code Organization (6 Points)

1. Elements are Named/Titled _____

- a) Elements are not named/titled = 0 points.
- b) Elements are named/titled = 2 points.

2. Elements are Logically Grouped and Organized. _____

- a) Elements are not logically grouped and organized = 0 points.
- b) Elements are logically grouped = 1 point.
- c) Elements are logically organized = 1 point.

3. Coding has Appropriate Flow _____

- a) No overlapping of code. All code must be individually visible = 2 point

II. Game Play (Up to 54 Points)

A. Implementation of Theme (18 Points).

1. Game Follows/Related to Theme _____

- a. Game does not follow or relate to theme = 0 points.
- b. Game follows and relates to theme = 2 points.

2. Appropriate Principles and Scientific Thought Applied to Theme _____

- a. Multiple (up to 5) scientific concepts are presented. (1 point each)
- b. Each scientific concepts is accurately presented (1 point each)
- c. Each scientific concept is specifically identified (1 point each)
- d. Scientific concepts are appropriate for their defined audience (1 point)

B. Graphics (12 Points).

1. Quality/Complexity of User Controlled Sprite _____

- a. No sprite = 0 points.
- b. Single sprite available = 1 point.
- c. At least one costume change = 1 point.
- d. Multiple costume changes = 1 point.
- e. Costume change (s) is/are appropriate for game = 1 point.

2. Quality/Complexity of Autonomous Sprites. _____

- a. No autonomous sprites = 0 points.
- b. At least one simple autonomous sprite available = 2 point.
- c. More complex autonomous sprites:
 - i. Can it move = 1 point
 - ii. Does it interact with anything = 1 point

3. Quality/Complexity of Background. _____

- a. No background = 0 points.
- b. Background available = 1 point.
- c. Background appropriate for theme and gameplay = 1 point.
- d. Background includes multiple elements = 2 points.

C. Sound (8 Points).

1. Sounds are Used. _____

- a. No sounds used = 0 points.
- b. Sounds used = 2 points.

2. Volume is Appropriate _____

- a. No sound used = 0 points.
- b. Sounds are used but are inconsistent/inappropriate = 1 point.
- c. Sounds are used and are appropriate = 1 point.

3. Quality/Complexity of Sounds _____

- a. No sound used = 0 points.
- b. Variation in sounds = 1 point.
- c. Background music included = 1 point.
- d. Sounds are appropriate given the theme = 1 point.
- e. Creativity of sounds = 1 point.

D. Play Balance (8 Points).

1. Level of Difficulty. _____

- a. Difficulty is appropriate given gameplay = 1 point.
- b. Objective is achievable = 1 point.
- c. There exists a way to lose = 1 point.
- d. Difficulty increases/decreases when appropriate (i.e. levels) = 1 point.
- e. Multiple levels included = 1 point.

2. Speed and Movement are Appropriate for the Game _____

- a. Speeds and movement are inappropriate for gameplay = 0 points.
- b. Speed is appropriate for gameplay = 1 point.
- c. Movement is appropriate for gameplay = 1 point.
- d. Movement and speed match environment = 1 point.

E. Overall Game (8 Points)

1. Overall Impression of Game _____

- a. Judge's Interpretation (from a user standpoint) = up to 4 points.

2. Originality of the Game _____

- a. Judge's Interpretation (from a user standpoint) = up to 4 points.

***Up to 105++ Points Total.**
