

## Diatoms - 2-4 players Rules Summary (v1)

### Overview:

- **Hexagon Water Tiles** (*two sided - both sides the same*):
  - Each hexagon is made up of 6 triangles.
  - Each triangle is one of five colors (plus white):
    - **Green**
    - **Blue**
    - **Red**
    - **Yellow**
    - **Purple**
- **Five Diatom Shapes** (*same for all five colors*):
  - **Circle**
  - **Oval**
  - **Triangle**
  - **Square**
  - **Star**
- **Lens Tool**:
  - Center it over the intersection of three hexagon tiles to look for groups of adjacent color triangles (*a sample point*)
- **Sample Points** (to collect diatoms):
  - Adjacent triangles of the same color form a group
  - The groups determine what shape diatom(s) you can take
    - **Size 1** (a triangle not adjacent to another same color)
      - Collect a **circle** diatom of that color
    - **Size 2** (two adjacent same color triangles)
      - Collect an **oval** (two pointed) of that color
    - **Size 3** (three adjacent same color triangles)
      - Collect a **triangle** (three sided) of that color
    - **Size 4** (four adjacent same color triangles)
      - Collect a **square** (four sided) of that color
    - **Size 5** (five adjacent same color triangles)
      - Collect a **star** (5 pointed) of that color
    - **Size 6** (full color)
      - Split the 6 triangles into two groups
      - Collect two diatoms of that color; one for each group
  - If you run out of a specific diatom that you wanted
    - Split that group into two groups
      - Collect two diatoms of that color; one for each group
    - If you can't split it (ie, it is size 1) or no diatoms are available after splitting it then do not collect diatoms.
- **Personal Game Board**:
  - After collecting diatoms, place them on **empty spots** on your game board of your choice (one per spot)
  - **Lines** between the spots indicate they are connected
    - There are three **rings** of spots (inner, middle, outer)
    - There are three **lines** of symmetry (horizontal, vertical, diagonal)
- **Guest Judges** (optional cards to give scoring variations):
  - **Green** side is an easy going side (for extra points)
  - **Pink** (*rose*) side is the persnickety judges (deduct points as well as award extra points)

### Setup:

- Separate the **diatoms** either by shape or by color into the five petri dishes (placed within reach of all players)

- **Give each player**:
  - a personal game board (*for placing diatoms*)
  - a score pad and pen or pencil (*for scoring*)
  - a field notebook (*for reference*)
  - two random tiles (placed in front of them visible to all)
- Place the **starting tile** (one of each color) in center of table
- Place a random tile adjacent to it (matching a color)
- **Remove tiles** from the game:
  - 3 players: remove **8** of the remaining tiles
  - 2 players: remove **12** of the remaining tiles
- Place **remaining tiles** in two equal piles
- Choose the **first player**. Give them the Lens Tool.
- **Optional**: Choose one **Guest Judge** card and choose their **green** or **pink** side (suggest NOT using this for first game)

### Game Play:

- A game consists of 8 rounds (10 for a 2 player game)
- Begin with the First Player, then play is clockwise.
- **On your turn**:
  - **Choose** ONE tile from the top of the two stacks
    - If one is empty, draw from the other
    - If both are empty, do not draw a tile
  - **Place** one tile from your hand (tiles chosen plus started with) so it touches at least one tile already in the center of the table. Keep remaining tiles for your next turn.
    - Adjacent colors must match. White is "wild".
  - **Collect** diatoms based on your Sample Point(s)
    - Could be more than 1 sample point!
    - You may use the **Lens Tool** to help you visualize.
      - Empty (white) triangles do NOT give any diatoms
  - Pass the **Lens Tool** to the next player (it's their turn now)
  - **Arrange** your newly collected diatoms on your personal game board.
    - The next player(s) may begin their turn while you decide.
      - In the final round a player may insist you place your diatoms before they begin their turn.
    - Once you finish your turn arranging your new diatoms on your game board they no longer may be moved.
    - You may not begin your next turn until you finish placing all your newly collected diatoms.
    - A diatom may be placed on any empty spot that matches its shape
      - You must place a diatom if there is an open spot for it
      - Diatoms that you are unable to place are returned to the petri dishes in the center of the table

### End Game Scoring (with score pad):

- Tally **total** diatoms of the same color, then score **40** if 8 or more; **20** if 5 or more; **5** if 3 or more
- Score for **pairs** of the same shape or color (**5**) or both (**15**) where ring lines and straight lines intersect
- Tally different shapes in **each ring**, then score **40** if 5 shapes, **20** if 4 shapes, **5** if 2 or 3 shapes
- **Optional**: score for Guest Judge per their card
- Highest score wins. In case of a tie, the tied player with the fewest diatoms on their board wins. Still a tie? It stays a tie!