ROLLING WATERS

Overview

Rolling Waters is a Roll & Write game in the **Energize** universe, designed to demonstrate the challenges of how we manage water. Each round, a pair of dice will be rolled, and players will copy its results onto their sheet. Your challenge is to manage water resources between the Industrial, Residential and Natural sectors (by deciding where and how you write each number). But your actions may have harmful repercussions without proper planning — it's not enough to just throw water at all your problems. Mitigation of harm is your key to victory!

Learning Objectives

Rolling Waters is designed for reflection on the real-world challenges we face when managing water resources. As you play, consider the following questions:
• Each time you invest water resources, there's a collateral effect on the Overflow Track. How much should you prioritize managing Overflow vs ignoring it?
• How can Water Treatment add flexibility in decision-making?
• How can Water Reclamation reduce demand in sectors?
• Sustainability Projects don't improve your water investments. Why are they useful?
• How does planning ahead impact long-term success?

Setup

Give the dice to any player. Give each player a copy of this sheet and a pencil.

Gameplay

There are 16 rounds of gameplay. Each round, *one* player will roll the dice. Then, *each* of you will simultaneously pick a number ("**#**") to write into the Industrial, Residential or Natural sector of your own sheet. Your unchosen **#** is written into your **Overflow** section. Once all players have written both numbers (the chosen **#**, and the leftover **#** in Overflow), reroll the dice for all players again.

Turn Clarifications

• Each player writes their numbers totally independently of other players. This means another player's choice of number to write down or location doesn't affect the number you choose.
• You also don't need to take turns - you should play your turns at the same time, similar to how multiple students write a quiz at the same time.
• The dice roller should be careful to make sure that all players have written their numbers before rolling for next round.

Writing Numbers

Each sector (Industrial, Residential and Natural) has its own way of using water. Follow that sector's instructions for where you're allowed to write the **#.**

Icons

Sometimes, you'll fill an area with an icon in it.

🟡 📋 🌱 **These are Interventions.** When you write into a space with one, circle the corresponding image on your sheet. You may use its effect at any time: to do so, cross off a circled intervention that hasn't been crossed off yet.

🟡 **Water Reclamation:** Write an extra 1 into any sector, in addition to your regular **#** this turn.

📋 **Water Treatment:** Increment a **#** up or down by 1 before you write it.
• 1's can only become 2's, and 6's can only become 5's.
• You can adjust a 1 created by Water Reclamation.

🌱 **Sustainability Project:** Don't circle this round's Overflow, even if you otherwise would have to. If you already didn't need to circle it, this does nothing.

🔵 🔴 🟢 **These are Policies.** These set off immediate chain-reactions for water use in other sectors. Whenever you write into a space with one of these icons, immediately write 1 extra copy of the **#** you had just written:
🔵 Copy that **#** in the Industrial sector, following its rules.
🔴 Copy that **#** in the Residential sector, following its rules.
🟢 Copy that **#** in the Natural sector, following its rules.

If you can't write the number (i.e. the column is already full) the policy is wasted. And if you fill another Policy space, you get to continue again. Big chain reactions are possible!

⭐ **This is 1 point.** This represents community health. Whenever you match the scoring criteria as listed in that sector, circle a star in that sector. Collect as many as possible!

Game End

Once the Overflow meter is fully filled, the game finishes at the end of that round. Tally your score by counting up each earned star in your 3 sectors.
Then, subtract stars from your Overflow based on the number of circled **#** you have.
If you have a score of 1 or better, you win!
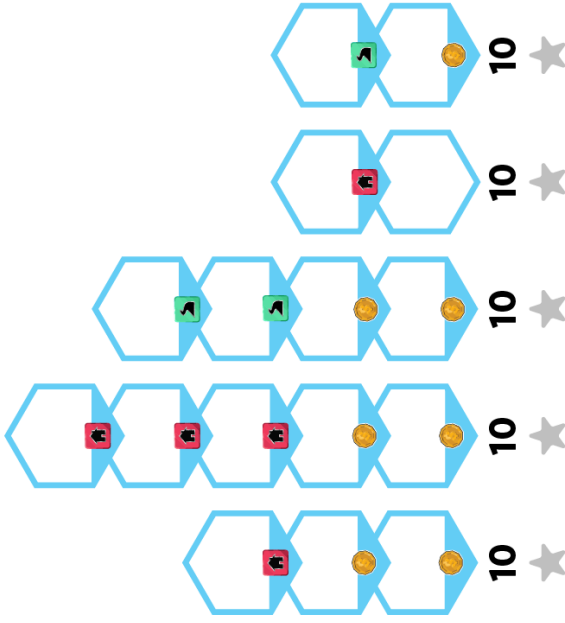For extra challenge: get the highest score out of your group!

Industrial

Write a **#** into the lowest open spot of any track.
Scoring: ★ per tower with a sum of exactly **10**.

10 ★
10 ★
10 ★
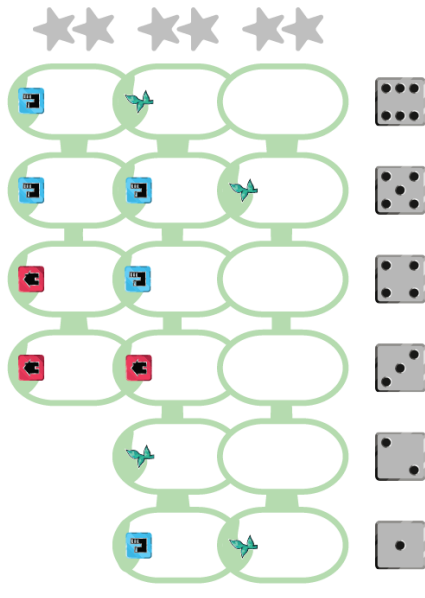10 ★
10 ★

Residential

Write a **#** directly beside any other **#**.
Write **1s** & **2s** to the **left** of any **#**.
Write **3s** & **4s** **above** any **#**.
Write **5s** & **6s** to the **right** of any **#**.
Scoring: ★ when you fill a ★ square.

6

⚙ **Water Treatment:** Adjust a **#** by +/- 1.

Natural

Write a **#** into the bottom open column of the matching number.
Scoring: ★ for filled **rows**.

🌿 **Sustainability Project:** Don't circle this round's Overflow.

Overflow

Write a **#** in the leftmost open space. If it's lower than the previous **#**, circle it.

🪙 **Water Reclamation:** Write an extra 1.

Penalty: *SUBTRACT* ★ per circled **#**.

FINAL ROUND

3