Learning objectives

- Sustainable communities meet the needs of people, the planet, and the economy.
- We all have a role in building a more sustainable future.
- We can decide how to use limited resources to create the kind of world we want to live in.

Materials

- “Future Builder” activity guide and sign
- “Future Builder” game cards (2 decks)
- Resource blocks (30 yellow, 14 green, 14 purple)
- Cloth bag

The activity guide, sign, and game cards can be downloaded from www.nisenet.org/sustainability or sustainablekits.asu.edu.

The physical SustainABLE kit includes custom blocks made from a recycled composite material. You can make your own resource blocks by painting the wooden blocks from two Jenga® sets (or another similar product) yellow, green, and purple. Blocks can be stored in a drawstring bag.

Preparation

Read through this facilitator guide, look at all the activity materials, and practice the activity with a friendly audience until you feel comfortable with it. (Note that the guests have an activity guide they can follow, which has the same step-by-step instructions as this facilitator guide.)

Step-by-step instructions

The objective of this game is to build a pretend community, represented by a tower of blocks. This game is best for 2-3 players. If you have more players, just have each one start with fewer blocks at the beginning of the game.

Guests use and earn blocks, which represent different kinds of resources: people (purple), nature (green), and money (yellow). These resources correspond to the three pillars of sustainability: society, environment, and economy.

This activity is meant to promote conversation about ways to plan and build sustainable communities, balancing the needs of society, the natural environment, and the economy. As you play the game with guests, you can ask questions that help them observe the tradeoffs among these “three pillars” of sustainability.
Explain the objective and set up the game:

- **Objective:** Work together to build everything your community needs, represented by the cards in the deck. Build sustainably to avoid running out of resources or knocking down your tower!
- Remove the title card and “trade card” from one deck of cards, and place the rest of the cards face down. Keep the trade card handy for reference.
- Give each player five blocks of each color, and explain that the purple blocks represent people, the green blocks represent nature, and the yellow blocks represent money. Keep the rest of the blocks in the bag, or “bank.”

  **Tip:** Word choice can help guests remember what each color represents: “purple for people,” “green, like grass, for nature,” and “yellow or gold, like money.”

  **Safety:** Keep an eye on the blocks. While they are too large to present a choking hazard, err on the side of caution and do not let young guests place them in their mouths. Do not let guests throw the blocks. Pick up any dropped blocks so they don’t create a slipping hazard.

1. The youngest player goes first. They draw a card from the deck and place it face up. This is what they will build first. Check the card to find out how many blocks it costs and how many blocks it earns in rewards.

2. **Player 1** takes the appropriate “cost” blocks from their resource pile, and uses them to build the foundation of the tower. Towers are built with three blocks side by side (to make a square). Player 1 takes the appropriate “reward” blocks from the bank and adds them to their resource pile.

3. **Player 2** then draws a card, adds blocks to the tower, and takes their reward. The next layer of three blocks goes on crossways. Play continues until someone is stuck, and doesn’t have enough resources to build. At this point, there are two options: trade resources at the bank or borrow from the bottom of the tower:

  **To trade blocks** with the bank:
  
  - 1 green = 3 yellow
  - 1 green = 2 purple
  - 1 purple = 2 yellow

So, if you need 1 green block you need to trade in 3 yellow blocks or 2 purple blocks. If you need yellow blocks, you can trade in 1 green (for 3 yellow) or 1 purple (for 2 yellow). During the trading phase, you may want to ask the players why they think the trades are valued this way (e.g., “Why does one nature block cost so much money?”).
To borrow blocks from the bottom of the tower: Using only one hand, players can gently remove blocks from the lower layers of the tower (any layer except the top). Players are not allowed to hold the other blocks in place, but rather have to find a block that is loose enough to remove with one hand. Removed blocks can either be added directly to the tower as the “cost” of the build card, or they can be traded at the bank first (allowing players to remove a different color than they need and then trade it in).

It’s possible that a player may get to a point where they can’t borrow or trade. They can wait another turn and try again. If they remain stuck, they can go out and let the remaining player(s) continue, or join up with another player by pooling resource blocks and building together.

4. Play continues until all the cards are built, the tower falls over, or no player is able to build further. When play ends, you can ask the group whether they think they “won” the game or not. If they’re not sure, you can ask if they think they built a sustainable community. (There is no right or wrong answer to these questions—they just provide the guests with an opportunity to reflect on the game and the sustainability ideas it represents.)

**Extending learning:** You can ask players to reflect on why they think certain items cost what they do or why they generate certain rewards. (For example, you might ask, “Why did you get two people blocks for building a house?” A reply to this might be, “Because people can live there now!”)

At the end of the game, you can also ask the guests to reflect on their “community” and consider whether there is anything they would remove to make it more sustainable. Similarly, you might ask if there is anything they might like to add to their community, and what they guess the costs and rewards of building it might be (in terms of green, purple, and yellow blocks).

**Variation**

Rather than having everyone build one tower together, you can also have players build their own towers. This allows players to compare the development of different “communities” based on what they build. To play this way, use both decks of cards.

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