

Go for the Green

Student Activity

Method:

Through the playing of the board game that accompanies this activity, students are presented with various scenarios that help them gain an appreciation for the complexities of making decisions that serve to protect rainforest lands.

Introduction:

Tropical rainforest destruction is an alarming issue, commanding the attention of scientists, environmentalists, and politicians worldwide. There are no easy solutions because deforestation is occurring for many reasons. Governments, banking institutions, indigenous people, loggers, and other groups differ on how the rainforests should be used. The pursuit of “green” currency may place the “green” ecosystem in jeopardy. The following game illustrates the difficulty of maintaining an ecological and economic balance when addressing rainforest issues.

Preparation:

The game is best played in groups of three to five students. You will need to reproduce the game board as well as the Choice and Risk cards so that each group has all three. (Note: Copying the Choice and Risk cards on different colors of paper avoids confusion.) Each stack of cards should then be placed face down on the game board. You also need to decide what you will use as game pieces. This could range from pen caps to something you may have in your room (i.e., erasers, coins, game pieces, etc.) or something that is related to the subject (i.e., rubber bands, sticks of gum, nuts, etc.).

Rules of the Game:

1. Each player will be responsible for keeping track of his/her points through each round. Before the game begins, each student should make a chart on a piece of paper with two headings – “Environmental points” and “Wealth points.”
2. Each player will start with 4 environmental points and 400 wealth points. The winner of the game is the first player to get 10 environmental points and 1,000 wealth points.
3. The players may place their markers anywhere on the game board to start. Movement around the board is in the clockwise direction. They can roll the dice to determine the order of the turn.
4. Each player will roll the dice and move around the board the designated number of spaces. After landing on a space, follow the directions given on the board.
5. If you are required to pick a Choice or Risk card, pick from the top of the pile, and put the card at the bottom of the pile when you are through.
6. A player may not choose an option on a Risk or Choice card that would put him/her into debt. For example, if a player has 300 wealth points and he/she picks a Choice card that has an option to lose 400 wealth points, this option cannot be chosen because the player does not have enough wealth points. But, if a card requires a player to pay 300 wealth points and the player only has 200 wealth points, that player will be in debt for 100 wealth points. In other words, a player cannot voluntarily choose to go into debt.

Note to the Teacher: If you find there is no winner by the end of the allotted time, reward each player 100 wealth points for each environmental point and total each player’s wealth points. The player with the highest number of wealth points will be the winner. It is advisable not to tell the students of this rule because it may change their strategy when playing.



Concept:

The earth’s rainforests are irreplaceable ecosystems that hold a significant place in the global environment. However, economic interests often pose obstacles to rainforest preservation.

Objectives:

- Students will be able to:
- Make decisions based on qualitative criteria.
 - Present the rationale behind their decisions to fellow classmates.

Subjects:

Social studies, environmental science, biology, and economics

Skills:

Decision making, game strategy

Materials:

- Choice and Risk cards
- Game board (duplicated from this activity)
- Dice
- Game pieces (be creative)

Follow-up Activities:

1. Lead a discussion on the outcome of each group's game and what students learned from their choices. Ask what the students would do differently if they played the game again and why.
2. Have students research one of the specific areas discussed on the Choice or Risk cards (for example, the effects of rainforest destruction on the indigenous peoples).

Assessment Ideas:

The class together could choose a specific rainforest of interest and conduct an in-depth study of all the aspects of the controversy. The students could be divided into groups and assigned specific subtopics to research.

UN praises your collective efforts to stop deforestation
(All players receive +1 environmental point)

CHOICE

RISK

CHOICE



**CHOICE
CARDS**

\$\$\$
(If you have more than 6 environmental points, you get +100 wealth points)
→

RISK

President offers cash award for exceptional action

**RISK
CARDS**

CHOICE

\$\$\$

RISK

You choose:
Risk Card or
Choice Card

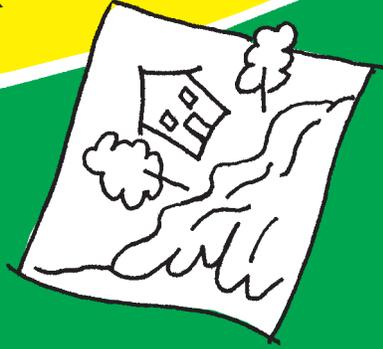


CHOICE

RISK

CHOICE

Heavy rains and soil erosion cause a destructive mud slide (-75 wealth points)



RISK

Time Magazine prints your article on rainforest destruction (+1 environmental point)



CHOICE

“GO FOR THE GREEN”

RISK

International Holiday-no activity (Miss a turn)



RISK

Record Nut Harvest (+100 wealth points)



CHOICE

RISK

Go for the Green Game Cards

Choice Card

You are the Minister of Agriculture for Thailand. Your job is on the line due to the lack of progress your country has made in dealing with the problem of feeding an increasing population. You can:

- Decide to tear down rainforest land as a desperate measure to plant more crops for food (- 1 environmental point, + 250 wealth points)

or:

- Make a controversial political move and propose seeking assistance from industrial countries and thereby going deeper into debt (+ 100 wealth points)

or:

- Make a stand for the environment and resign from the job, stating your opposition to destroying more rainforest and emphasizing the need for a comprehensive population policy (+3 environmental points, -200 wealth points).

Choice Card

You run a small-scale mining operation in the Amazon region, bulldozing and dredging stream banks in search of gold ore. The government has recently enacted new environmental regulations on mining practices in your region. In order to comply with these regulations your company would have to forfeit almost one year's profit. You can:

- Follow the regulations to the letter and write your money off (+ 2 environmental points, - 250 wealth points)

or:

- Use a favor you have with local officials to postpone an inspection of your operation, giving you a year or so leeway (+ 1 environmental point, - 100 wealth points)

or:

- Go deeper into the forest and set up a secret mining operation illegally, disregarding all environmental or health regulations (-2 environmental points, +250 wealth points).

Choice Card

You are aware of the increased energy needs created by a rapidly growing population. As a graduate of a prominent Brazilian engineering university, you have two job offers in the energy field. You can:

- Work with a low-paying, non-profit group, designing and building an experimental solar energy system resting in the rainforest canopy (+2 environmental points)

or:

- Work on the operation and maintenance of a hydroelectric dam which generates large amounts of electricity, but also damages the surrounding rainforest (-1 environmental point, +350 wealth points).

Choice Card

Giggley's Gum, Inc. has offered to double its order for chicle latex (used to make chewing gum) next year. However, your land is currently producing as much chicle latex as possible and you are unable to fill the order. You can:

- Tell Giggley's you are unable to provide that amount of product (+1 environmental point)

or:

- Slash and burn surrounding rainforest to cultivate new plants and promise Giggley's you will fill the order within a year or two (-1 environmental point, +200 wealth points).

Go for the Green Game Cards

Choice Card

Due to an increased number of espresso drinkers worldwide, demand for the coffee beans from your land has risen dramatically. You can:

- Meet the demand by over-planting and cutting down surrounding land. Although this process will destroy the land within five years, you will have made enough money to retire (-2 environmental points, +300 wealth points)

or:

- Maintain production schedule, hoping that the demand will continue indefinitely, and allowing the land to survive for other uses (+2 environmental points, -150 wealth points).

Choice Card

You go to the grocery store for your weekly items. You see that many of the store brand products are cheaper, but you usually shop environmentally by paying attention to packaging and looking for products harvested from the tropical rainforests. You can:

- Purchase the store brand items to save some money (-1 environmental point, +50 wealth points)

or:

- Spend the extra money on the sustainable products and support the rainforest region (+1 environmental point, -50 wealth points).

Choice Card

You live in North America and raise exotic birds. Much of the rainforest habitat of your favorite species has been destroyed, due to increased demands on the forest caused by overpopulation and irresponsible practices. The bird is in danger of becoming extinct. You can:

- Stop importing the birds from the rainforest where they have been captured and removed from their natural habitat (+1 environmental point)

or:

- Create a private bird sanctuary and continue importing and breeding these birds, figuring you can provide a safer environment than the decreasing forest (+2 environmental point, -150 wealth points)

or:

- Capitalize on their increasing rarity by importing and breeding the birds to sell for profit (-1 environmental point, +200 wealth points).

Choice Card

You own a small cashew plantation. The large American company Nifty Nuts, Inc. has decided not to renew your contract for cashew shipments. You can:

- Hold on to your land, forgo the money from this year's harvest, and hope for better luck next year (+1 environmental point, -150 wealth points)

or:

- Join forces with several other small farmers, combining land so that you can share profits and losses (+50 wealth points)

or:

- Sell the land to a big cattle rancher who needs more grazing room (-1 environmental point, +150 wealth points).

Go for the Green Game Cards

Choice Card

You are a manufacturer of rubber wet-suits in Los Angeles. You have two options for sources for the raw rubber. You can:

- Buy from small farmers, who extract the rubber sustainably, at a higher price (+1 environmental point, - 100 wealth points)

or:

- Buy from large plantations who have cleared forest for their rubber crops (-1 environmental point, +150 wealth points).

Choice Card

The government of the Democratic Republic of Congo has offered you a contract to build a road into one of the rainforests to facilitate commercial game hunting. You can:

- Refuse the job, explaining that large-scale commercial hunting leads to extinction and that the road construction will completely disturb the ecosystem (+2 environmental points, -300 wealth points)

or:

- Accept the job, reasoning that otherwise someone else will do it, and people need to eat (-2 environmental points, +300 wealth points).

Choice Card

A new plant species has been discovered on land you own in the rainforest. Scientists believe the plant may have healing powers. You can:

- Sell the land to the government who intends research this plant — although you cannot be assured this government will stay in power to conduct the necessary research (+150 wealth points)

or:

- Keep the land in its natural state and receive a small stipend from an international science group to conduct its own research (+1 environmental point, +50 wealth points)

or:

- Continue to slash and burn the land for profit (-2 environmental points, +300 wealth points).

Choice Card

As a National Geographic photographer assigned to capture the beauty of Indonesia's rainforest, you are determined to travel deep into the heart of the forest. When making travel plans you can:

- Take a plane operated by a large-scale developing company, lasting about an hour (-1 environmental point, +1 extra turn)

or:

- Hire a guide, buy provisions, and travel the distance by river and on foot, taking two extra weeks (+1 environmental point, -75 wealth points).

Go for the Green Game Cards

Choice Card

You are a leader of a group of migrant peasants in the Ivory Coast. Due to population pressures and overuse of rainforest land, your people are forced to travel from area to area within the forest for fuel, food and shelter. Now environmental and government groups are pressuring you to give up your lifestyle so the land can be preserved. You can:

- Accept their arguments that your practices are harming the rainforest and move your people to an area where you do not know how to survive (+2 environmental points, -300 wealth points)

or:

- Continue to live off the land as long as you possibly can and petition to continue your way of life (-1 environmental point, +150 wealth points).

Choice Card

You are the president of Sunny Drinks, Inc. Your company's product, Truly Fruity, is not selling because it doesn't have enough tropical fruit flavor. You can:

- Use "incentives" to encourage his tropical fruit supplier to triple the output of their crops without having to purchase extra land (-2 environmental points, +250 wealth points)

or:

- Spend the extra money on fruit which is sustainably harvested, basing a new ad campaign about the rainforests and the need to preserve them (+1 environmental point)

or:

- Cut your losses and abandon the line altogether, concentrating on your popular Prunetta Punch (+50 wealth points).

Choice Card

You are a young entrepreneur and have successfully opened a small furniture shop. A salesman comes into your shop with beautifully made mahogany desks, asking an unbelievably low price. You can:

- Refuse to purchase the items because mahogany comes from the rainforest and you boycott such products (+1 environmental point, -100 wealth points)

or:

- Purchase many of the desks to sell in your store (-1 environmental point, +200 wealth points).

Choice Card

You are a cocoa supplier for Sweet Dreams, Inc. which is coming out with a new product called Choco-Caramel Delight. The company has strong indicators that this will be a smash so they want to increase production. You can:

- Increase land for planting cocoa by destroying an area of rainforest you had set aside for public relations reasons (-2 environmental point, +250 wealth points)

or:

- Continue to produce the same amount of cocoa and send Sweet Dreams elsewhere for the additional need (+1 environmental point).

Go for the Green Game Cards

Choice Card

You have handled guns your whole life. One day at the shooting range, you are approached by two businessmen who proposition you to go to Central Africa and commercial game hunt. You can:

- Decide to go because the money is good and you love hunting. However, the numbers they are asking you to kill could have a detrimental effect on the survival of several species (-2 environmental points, +300 wealth points)

or:

Strike a bargain with the businessmen and agree to kill a certain quota of game that will allow the species to continue to survive (+1 environmental point, +50 wealth points)

or:

• Decide to decline the offer in hopes of stopping the possible wholesale slaughter of several game species. (+3 environmental points, -300 wealth points)

Choice Card

You have won the state lottery and decide to go on your dream vacation to the Malaysian rainforests. When making your travel arrangements you have two options. You can:

- Take advantage of a “budget deal” offered by your local travel agency, which charters an American plane and uses American guides (-1 environmental point, +150 wealth points)

or:

• Pay more for an “eco-tour” which emphasizes learning about the environment and ensures money goes to the local economy, lessening economic pressures to cut down the forest for natives (+1 environmental point, -150 wealth points).

Choice Card

A world-famous Indian chef has realized the missing ingredient in one of her new specialties. All she needs is a spice that is found in a plant indigenous to the Madagascar rainforest. This plant is on your rainforest land, but has been preserved because a specific species of lemur feeds only on this plant. You can:

- Let your stomach do the talking and extract the spice from the plant at the expense of the lemur (-2 environmental points, +300 wealth points)

or:

• Send the chef elsewhere which will certainly please the lemur (+2 environmental points)

or:

• Allow the chef to extract the spice from a portion of your land, thereby preserving the lemur (+1 environmental point, +100 wealth points).

Choice Card

You have received a large sum of money from a film distributor for a documentary you made about the plight of the tropical rainforests. You can:

- Give the money back to the countries where you shot the film, by setting up conservation and service groups (+3 environmental points, -200 wealth points)

or:

• Keep the money and buy yourself some well deserved treats (+200 wealth points)

Go for the Green Game Cards

Risk Card

You are a subsistence farmer struggling to make a living off your plot of rainforest. A large cattle rancher is urging you to sell your land in order to tear down your plot for grazing. If you have 500 wealth points, you are able to resist (+1 environmental point). However if you have less than 500 wealth points, you are forced to sell out (-1 environmental point).

Risk Card

Due to improper maintenance, a fuel storage tank for logging equipment leaks toxic substances into the water supply. You lose 2 environmental points unless you have 500 wealth points to take care of the problem before significant damage is done.

Risk Card

A huge forest fire is raging throughout Indonesia's East Kalimantan. If you have virgin/ unlogged forest (5 environmental points or more), you are okay. If you have logged forest, you lose it all (-300 wealth points).

Risk Card

A North American zoo would like to find a mate for their female macaw. They want to breed the species because it is considered endangered. If you have enough unlogged forest (5 environmental points or more), you can take advantage of the zoo's offer to pay 400 wealth points for a male macaw.

Risk Card

A heavy rainfall floods your land and causes tremendous erosion because you were forced to live on marginal ground due to overpopulation. You lose 150 wealth points.

Risk Card

An International Global Warming Coalition is offering financial assistance to those who have demonstrated dedication to preserving the rainforests. If you have 5 or more environmental points, you get 200 wealth points.

Risk Card

An elderly, eccentric landowner is offering to sell a large tract of rainforest to someone willing to commit to preserving the land. You may trade 150 wealth points for 2 environmental points, if you want to do this.

Risk Card

Large amounts of curare are found on your segment of the rainforest. (Curare is used as a muscle relaxant for surgery). A hospital chain from Europe gives you 150 wealth points for your supply.

Risk Card

A wealthy European perfume manufacturer is interested in extracting oils from some rainforest plants (bay oil, camphor oil, eucalyptus oil, patchouli oil, rosewood oil, sandalwood oil, and ylang-ylang). If you have 5 or more environmental points, you receive 100 wealth points from this company.

Risk Card

You are throwing a large party and want to serve some ecologically sound food, however you have financial concerns to consider. If you have 400 or more wealth points, have a "rainforest caterer" deliver nuts, dried fruits, palm hearts, etc. (+ 1 environmental point) or: if you have under 400 wealth points, forgo the environmental snacks and buy pretzels.

Go for the Green Game Cards

Risk Card

You and your family are attacked by guerrillas fighting civil war in the Congo Basin. Unfortunately, your son is severely hurt. If you have 400 wealth points, he can get the necessary medical attention. However, if you do not and he should die, your number of laborers will be too low and you will be forced to sell your rainforest land to the loggers (-2 environmental points).

Risk Card

Your deforestation practices in the Himalayan mountains helped contribute to the 12 million acres of damaged land in India (-1 environmental point).

Risk Card

This is your lucky day! On your way to an important conference on saving the rainforest, you are seated next to a famous rock star on the plane. You convince her not only to attend the conference, but to promote your cause on her next album (+2 environmental points).

Risk Card

Your new line of “rainforest cosmetics” is a big hit. Not only is it selling well (+100 wealth points), but it is raising awareness of rainforest destruction and promoting sustainable harvesting (+1 environmental point).

Risk Card

As a wealthy alumnus of an Ivy League university, you are approached by a group of students trying to start a conservation biology program. If you want to support their efforts, you may trade 150 wealth points for 2 environmental points.

Risk Card

You have clear-cut the rainforest to provide pastures for your cattle. However, within a year, the land is invaded by toxic weeds which kill all your cattle (-1 environmental point, -100 wealth points).

Risk Card

Congratulations! Your proposed “debt for nature” trade between a U.S. bank and the government of Congo was adopted (+1 environmental point).

Risk Card

You have developed a series of rainforest preservation T-shirts which have become a huge success with teenagers (+1 environmental point, +100 wealth points).