

Digestive Board Game: *Down the Tube*

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Intended Age Level: 4-8

Number of players: 2-4

Description: Classic roll the dice like progression game where players race each other down the digestive tract while learning about the digestive system and a variety of digestive disorders.

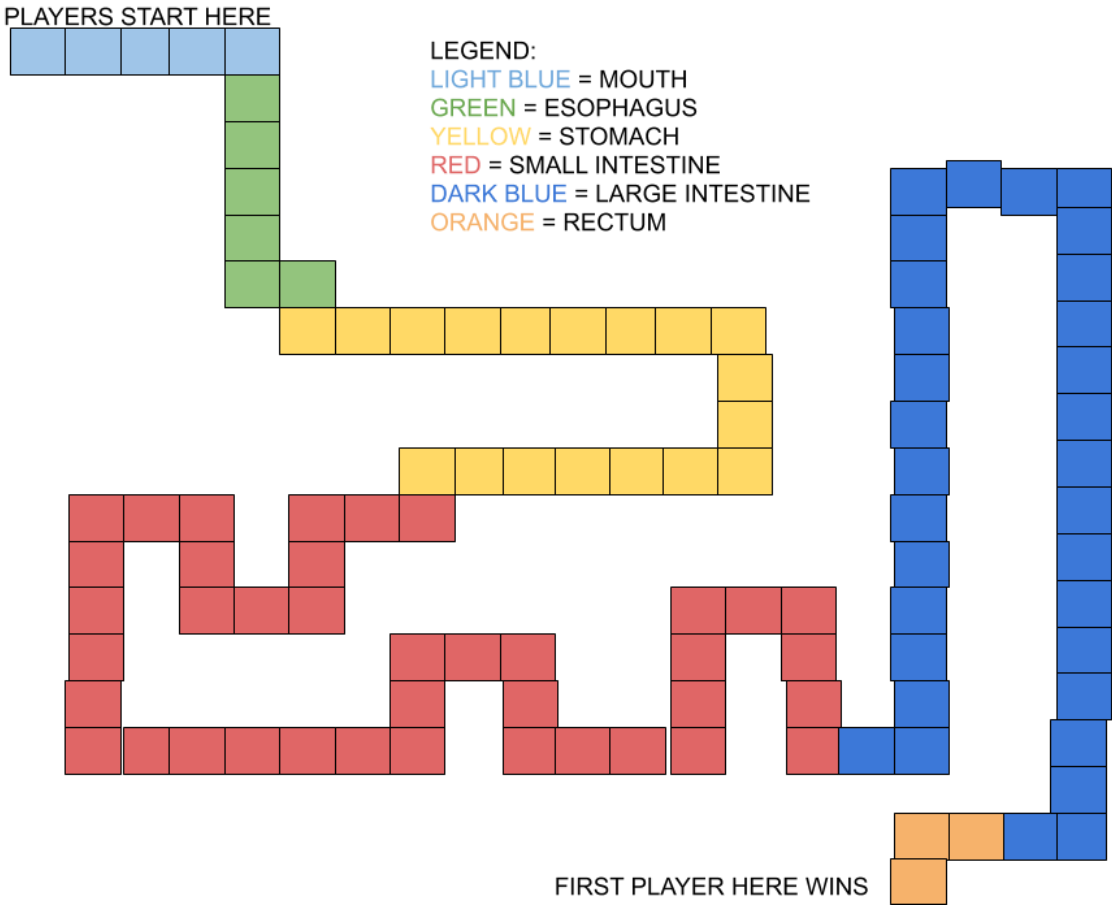
Directions:

Each player starts with some token at the beginning of the game board. The order of player turns gets decided by whoever rolls the highest number on a pair of dice.

During each player's turn they can roll a dice which will decide how many spaces they advance on the board after the move they draw a card which will provide some type of effect on the game like moving players back a few spaces. Whoever ends up getting to the end of board or "digestive system" first ends up winning the game.

A rough mock up of a game board is on the next page along with some possible card drafts which contain educational content relating to the digestive along with some relatively minor game modifications.

The Board:



The Effect Cards:

Here's a few designs for the possible effect cards which are described in the following format:

Card Name

Card Description

Effect

GERD

Card Text: Gastroesophageal Reflux Disorder refers to having stomach acid and enzymes frequently go up the esophagus from the stomach and damage the epithelial lining of the esophagus.

Card Effect: All players in the "stomach" region move 5 spaces back.

GASTRITIS

Card Text: Gastritis refers to excessive inflammation of the

Card Effect: All players in the "stomach" must return to the starting point of the game.

CHYME

Card Text: When food enters into the stomach it undergoes mechanical and chemical breakdown into a substance we call "chyme".

Card Effect: Move forward an additional 2 spaces

PANCREAS

Card Text: The pancreas is an accessory organ to the small intestine and helps produce useful enzymes which assist in breaking down chyme.

Card Effect: Choose another player to move forward 3 spaces.

GALLSTONE

Card Text: Gallstones are crystallized cholesterol formations in the gallbladder which could end up blocking the flow of bile from the gallbladder to the small intestine. In severe cases a patient may have their gallbladder removed because of gallstones!

Card Effect: Skip the next player's turn

HEMORRHOID

Card Text: Hemorrhoids refer to blood vessel bulges/tears in the rectum and can cause severe pain.

Card Effect: All players in the rectum area move back 10 spaces.

VILLI:

Card Text: Villi are the small tentacles like appendages in the small intestine used to absorb nutrients from chyme.

Card Effect: Move forward 2 spaces and draw another card.

PERISTALSIS

Card Text: Peristalsis is the phrase used to refer to the process of smooth muscle contractions which push food/chyme through the digestive tract.

Card Effect: All players move forward 1 space

CELIAC DISEASE

Card Text: Celiac Disease is an autoimmune disorder where the body will destroy its own villi inside the small intestine after consuming gluten damaging the body's ability to absorb nutrients.

Card Effect: All players in small intestine move 10 spaces back

PYLORUS

Card Text: The pylorus is the valve in the stomach which dribbles chyme into the small intestine.

Card Effect: All players in the stomach advance forward until reaching the small intestine.

AMYLASE

Card Text: Amylase is an enzyme which helps breakdown sugars.

Card Effect: All players in the small intestine move forward 1 additional space

LARGE INTESTINE

Card Text: The large intestine mostly focuses on water absorption and compacts unabsorbed chyme into fecal matter.

Card Effect: All Players in the large intestine move forward 2 spaces.

GINGIVITIS

Card Text: Gingivitis refers to excessive inflammation of the gums which can result in gum decay.

Card Effect: All players in the mouth move back 1 space.