## Hierarchies

Object of the game: To score as many points as possible by making hierarchies. Make hierarchies by making a column of cards where the top card is the broadest category of shapes and each card beneath it would fit completely within the card above it. For example:

| Top (broadest category) | Triangle | Polygon | Polygon | Polygon |
| :---: | :---: | :---: | :---: | :---: |
|  | Isoceles triangle | Pentagon | Quadrilateral | Quadrilateral |
| Renalateral triangle |  | Parallelogram | Rhombus | Square |
| Bottom (narrowest category) |  |  | Square |  |

Materials needed: Hiearchies cards and whiteboard/markers/erasers for keeping score.
To win: Shuffle the cards. Deal out 4 cards to each player. The players should lay these out in a row face up so everyone can see them. Put the remaining cards in a stack face down in a pile where everyone can reach them. This will be the draw stack.

If players can combine any of the 4 cards in their row into a hierarchy, they do so by putting the cards in a column (top to bottom) in the correct order to make a hierarchy.

First player draws a card. They can use it to add to a hierarchy in any of their 4 columns, or they may trade any of the cards in any of their columns for the drawn card. Or, if they have fewer than 4 columns, they can use the card to start a new column - up to 4 . Put any discarded cards in a stack face up next to the draw stack.

The next player can either draw from the draw stack, or take the top card from the discard stack if they can use it.
If a player draws a "Wild Card" they can write on it whatever shape they want and add it to one of their hierarchies. If a player draws a "Swipe Card" they can Swipe one unprotected card from one of the other players.

If a player makes a hierarchy with at least 3 cards, they can choose to "protect" that hierarchy by setting it aside and removing it from play. They may not add cards to protected hierarchies, and no one can swipe from protected hierarchies.

Players can re-arrange the unprotected cards in their hierarchies at any time to make better hierarchies. Each player can have up to 4 hierarchies going at one time.

To win: Play until time is up or all the cards in the draw stack have been used. Score according to the scoring card. Player with the most points wins. Print: 2-sided

## Scoring :

- 5-card hierarchies = 10 points
- 4-card hierarchies $=5$ points
- 3-card hierarchies $=2$ points
- 2-card hierarchies = 1 point
- $\quad$ Single cards - 0 points


Possible Complete Hierarchies -- Hierarchies do not have to be complete to earn points, but they must be in the correct order from top to bottom, even if some shapes are missing at the top, bottom or in bewtween.

| Polygon <br> Triangle <br> Isoceles Triangle <br> Equilateral Triangle | Polygon <br> Triangle <br> Scalene Triangle | Polygon <br> Quadrilateral <br> Parallelogram <br> Rectangle <br> Square | Polygon <br> Pentagon |
| :--- | :--- | :--- | :--- |
| Polygon <br> Quadrilateral <br> Parallelogram <br> Rhombus <br> Square | Polygon <br> Quadrilateral <br> Trapezoid <br> Isosceles Trapezoid | Polygon <br> Hexagon | Polygon <br> Octagon |

Hexagon
$\qquad$
5.5.A - Classify 2D Figures - Hierarchies


## Paralellogram

## Rhombus

## Trapezoid

## Isosceles Trapezoid

## Quadrilateral

## Paralellogram

## Square



Triangle

## Triangle

## Quadrilateral

Isoceles Triangle

Equilateral Triangle

## Quadrilateral

## WILD



## Polygon

Polygon
5.5.A - Classify $2 D$ Figures - Hierarchies

## Polygon

## Polygon

## Polygon

## Polygon

## Polygon

SWIPE


Hexagon
$\qquad$
5.5.A - Classify 2D Figures - Hierarchies


## Paralellogram

## Rhombus

## Trapezoid

## Isosceles Trapezoid

Rectangle

## Quadrilateral

## Paralellogram

## Square

SWIPE


Triangle

## Triangle

## Quadrilateral

Isoceles Triangle

Equilateral Triangle

## Quadrilateral

## WILD



## Polygon

Polygon
5.5.A - Classify $2 D$ Figures - Hierarchies

## Polygon

## Polygon

## Polygon

## Polygon

## Polygon

SWIPE


