

Lesson Printables

Be a rockstar and only print what you need!



Planners: 2-3

Angle Snap Cards

(Print double-sided)

Sunlight: 4-9

Twilight: 10-19

Midnight: 20-31

Extras

Rules: 32

Angle Cards: 33

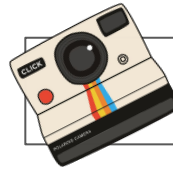
**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Shape and Space - Identifying angles

Starter	Main Activity and Input: Identifying types of angles by playing Angle Snap.	Plenary
<p>What are the chances? Which scenario belongs to which sign?</p> <p>To support: 1. What do the words on the signs mean? Discuss each word individually.</p> <p>To challenge: 1. What are some other possible scenarios that could go with each sign?</p>	<p>Input:</p> <ol style="list-style-type: none"> Slide 6 shows a picture of the Angles family. What do students notice? What do they already know about angles? Discuss observations as a class. Slide 7 shows some angles. What angles can students identify? How can they prove their thinking? Slides 8 to 13 explicitly cover each type of angle. With right, acute and obtuse angles, it might be helpful to use a sticky note to identify the angle. Model lining up a vertex of your sticky note with a vertex on the slide and also one of the lines of the angle. If the two lines match the edges of the sticky note, the angle is a right angle. If the other line goes 'beyond' the sticky note and is not a straight angle, the angle is an obtuse angle. If the sticky note covers one of the lines, it is smaller than a right angle, so it must be an acute angle. <ul style="list-style-type: none"> - Right angle: 90° and occurs when perpendicular lines meet. - Acute angle: Less than 90°. - Obtuse angle: Greater than an acute and right angle. Smaller than a straight angle. Measures between 90° and 180°. - Straight angle: Straight line. Always measures 180°. - Reflex angle: Greater than a straight angle. (We have said to think of someone bouncing on a trampoline and making really big splits like a gymnast.) Measures between 180° and 360°. - Full rotation: 360°. (Skateboarders or other athletes might do a '360', which means spinning around in a full rotation.) Slides 14 to 18 model the main activity: identifying/matching angles and playing Angle Snap. Slide 14 shows Angle Snap cards. Ask students which cards could be matched together because they show the same type of angle. (We've coloured-coded the cards, so students can write their matches using colours.) <i>Note, the degree measurements do not match the angle pictures. They are examples of a particular type of angle.</i> Slides 16 to 18 show how to play Angle Snap. <ul style="list-style-type: none"> - Deal out all of the cards face down to the players. Players take turns flipping over a card and placing it in the middle. - If there is a match, any player can snap the pile and win all of the cards. A match could be any two cards that connect to the same type of angle. E.g. picture/picture, picture/number, number/number, number/name, etc. - The player with the most cards is called the winner. If a player runs out of cards, they can always rejoin the game by making a snap. <p>Activity: Identify and match angles.</p> <ol style="list-style-type: none"> Print and cut out the snap cards for all learning zones. These will need to be printed double-sided. Players should match the cards first before playing the game. This is so they can identify all of the angles. Play Angle Snap. Students could play this game in pairs or groups of up to 4 players. <p>To support:</p> <ol style="list-style-type: none"> Print the angle cards for players to refer to. Students could use sticky notes to help them identify different angles. <p>To challenge:</p> <ol style="list-style-type: none"> Twilight Zone includes all 6 angles. Midnight Zone cards include turns. E.g. 90° and a quarter turn would be a match. Encourage students to make each other verify how they know when they've made a match. 	<p>Angle Snap: Shout out an angle and ask students to show you the angle using their arms or legs. Pretend to 'snap' a picture (or really do this for display purposes!) of students and their angles.</p> <p>Check for understanding: 1. Can students create different angles with their bodies?</p>

Things that might be useful for this lesson:

- Individual whiteboards:
 - Help students to record their thinking and share ideas with others.
- Shape manipulatives:
 - Could be used as a tangible object for students to find angle types.
- Print angle cards:
 - For students who require scaffolding.



Peek at the Printables:

Sunlight Zone **Twilight Zone** **Midnight Zone**

The Sunlight Zone printables show diagrams for Right Angle, Acute Angle, Obtuse Angle, Straight Angle, Reflex Angle, and Full Rotation. The Twilight Zone printables show diagrams for Right Angle, Acute Angle, Obtuse Angle, Straight Angle, Reflex Angle, and Full Rotation, with specific angle measurements like 90°, 120°, 135°, and 180°. The Midnight Zone printables show diagrams for Quarter Turn, Acute Angle, Obtuse Angle, Straight Angle, Reflex Angle, and Half Turn, with specific angle measurements like 90°, 120°, 135°, 180°, and 300°.



Greener Alternatives:

- Rather than printing the angle cards, you could create different sized angles using chalk outside, with tape inside, or on small whiteboards in stations. Students could move between them to identify the different types of angles.



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!

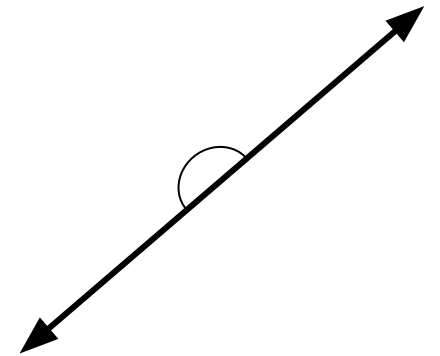
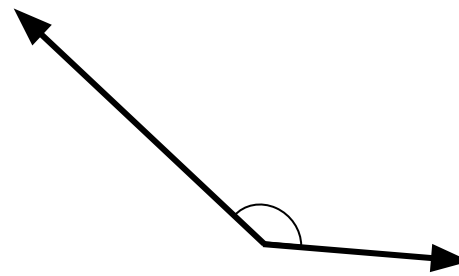
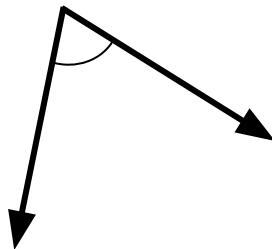
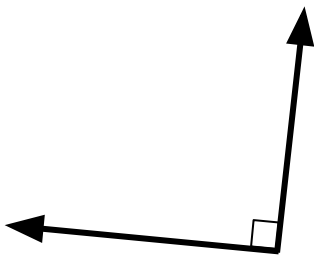
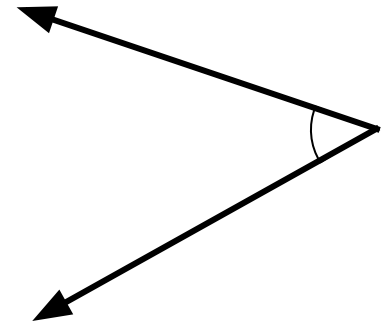
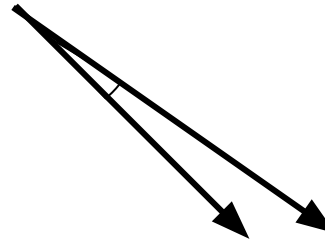
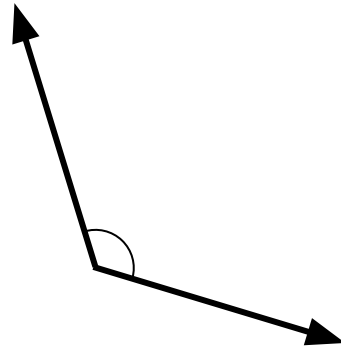
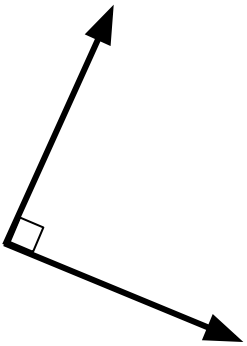
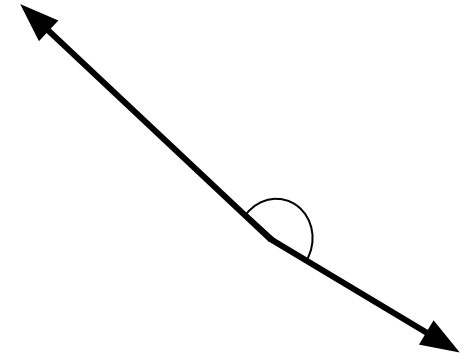
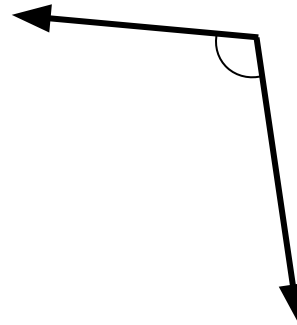
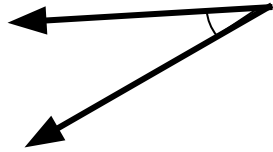
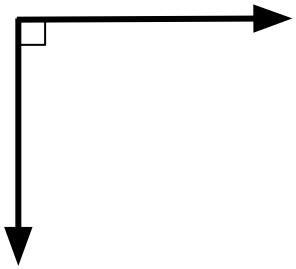


Sunlight Angle Snap!



Sunlight Angle Snap!





Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Obtuse
Angle**

**Right
Angle**

**Obtuse
Angle**

**Acute
Angle**

**Acute
Angle**

**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Straight
Angle**

Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!



Sunlight Angle Snap!

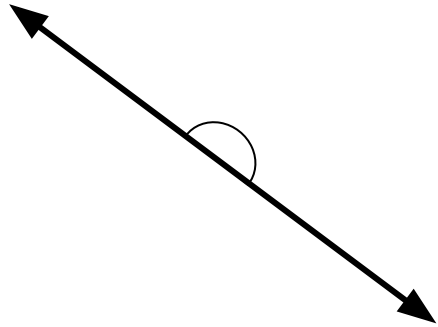


Sunlight Angle Snap!



Sunlight Angle Snap!

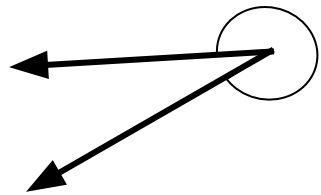




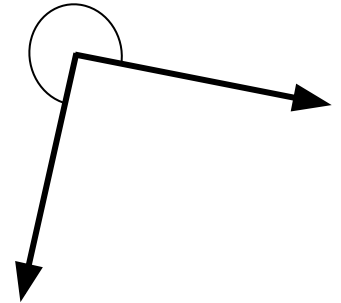
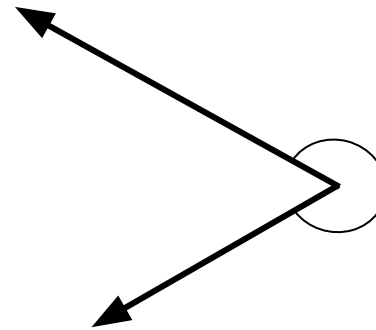
**Straight
Angle**

**Reflex
Angle**

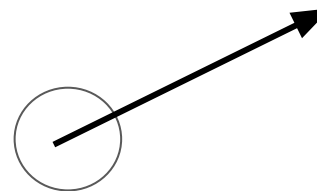
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Angle**



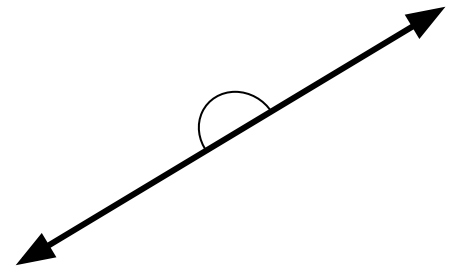
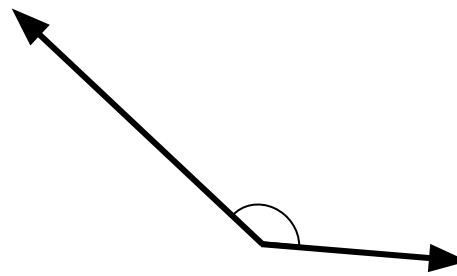
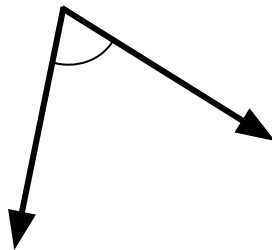
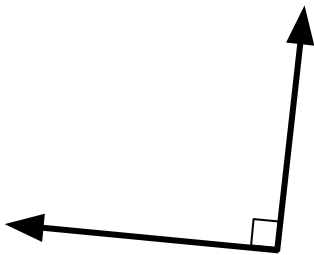
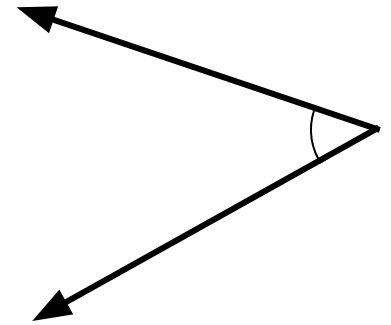
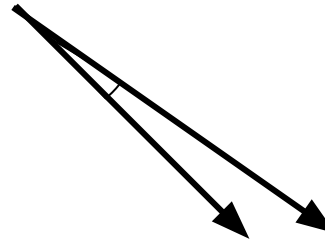
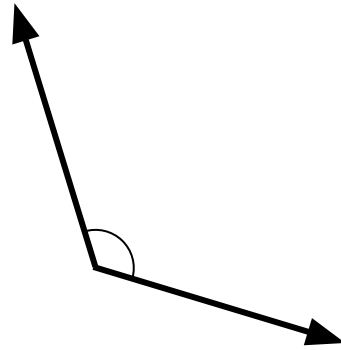
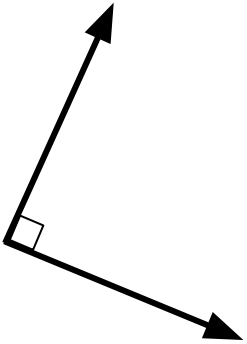
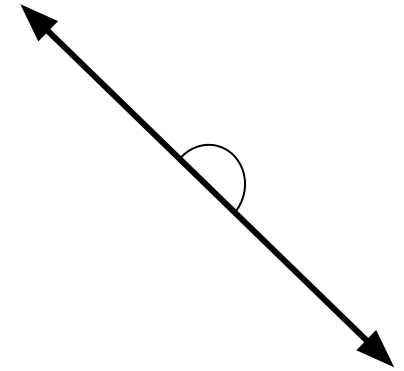
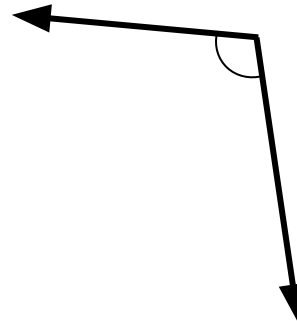
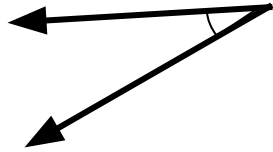
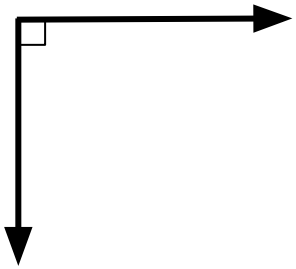
**Reflex
Angle**



**Straight
Angle**



**Full
Rotation**



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Straight
Angle**

**Right
Angle**

**Obtuse
Angle**

**Acute
Angle**

**Acute
Angle**

**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Straight
Angle**

Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



90°

12°

175°

180°

90°

99°

73°

360°

210°

49°

125°

195°

Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



90°

1°

210°

180°

90°

84°

181°

360°

290°

67°

125°

325°

Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!



Twilight Angle Snap!

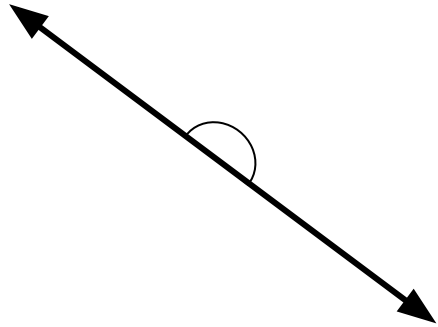


Twilight Angle Snap!



Twilight Angle Snap!

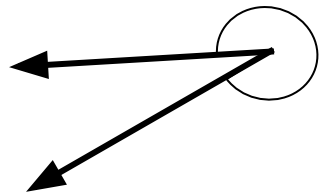




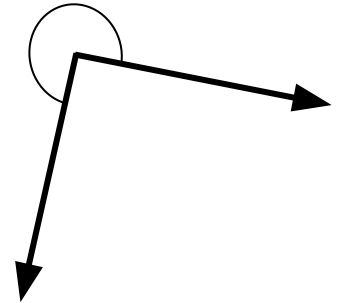
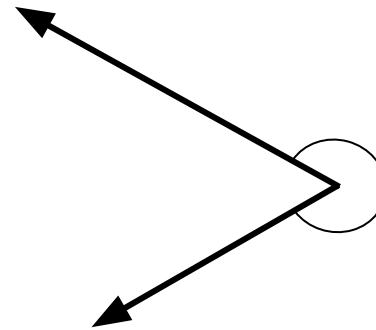
**Straight
Angle**

**Reflex
Angle**

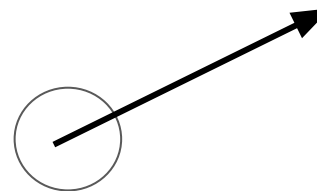
**Reflex
Angle**



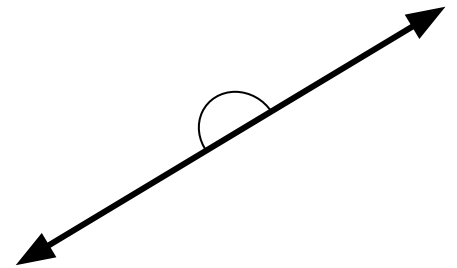
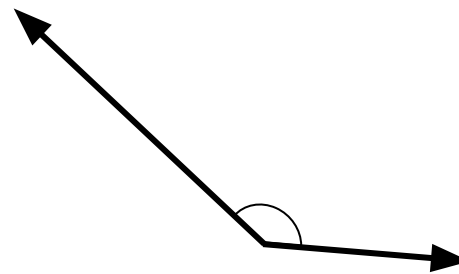
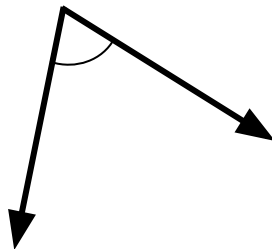
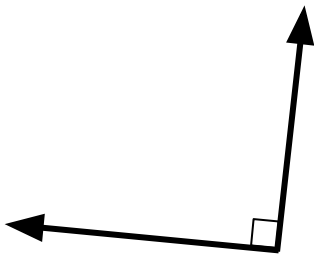
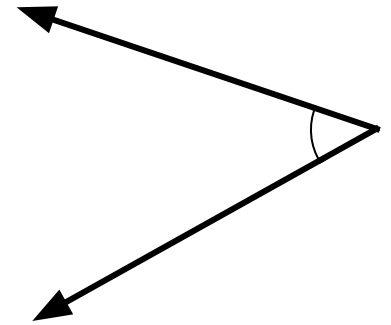
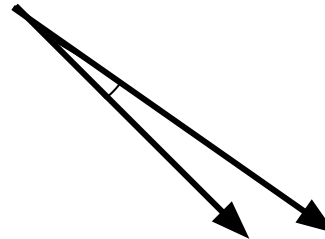
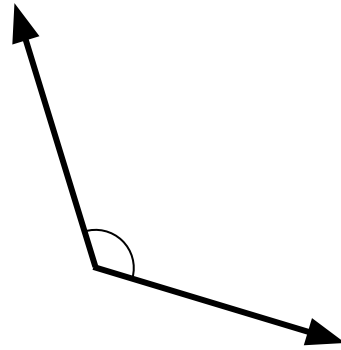
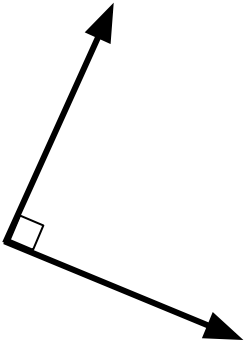
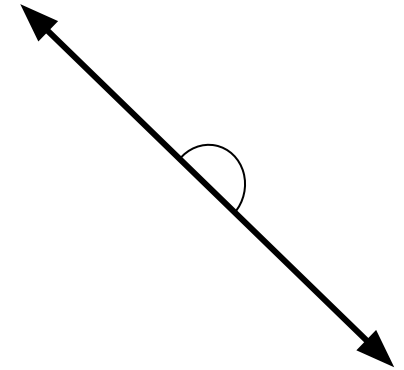
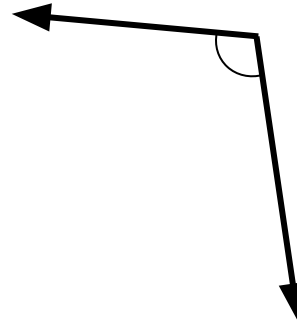
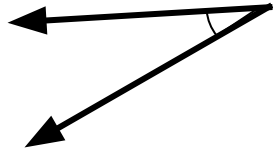
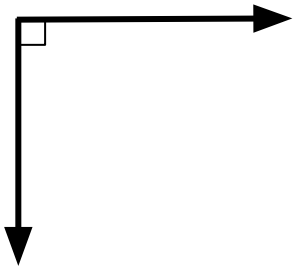
**Reflex
Angle**



**Straight
Angle**



**Full
Rotation**



**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Straight
Angle**

**Right
Angle**

**Obtuse
Angle**

**Acute
Angle**

**Acute
Angle**

**Right
Angle**

**Acute
Angle**

**Obtuse
Angle**

**Straight
Angle**

90°

12°

175°

180°

90°

99°

73°

80°

91°

49°

125°

180°

90°

1°

210°

180°

90°

84°

181°

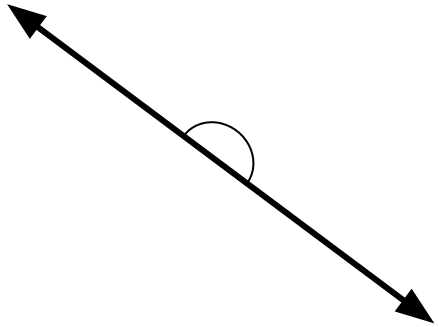
360°

290°

67°

125°

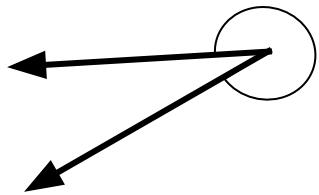
325°



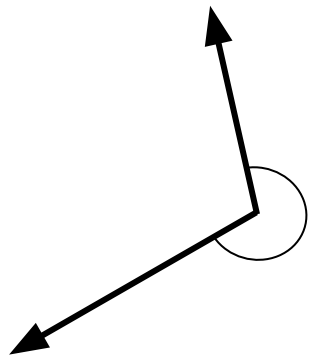
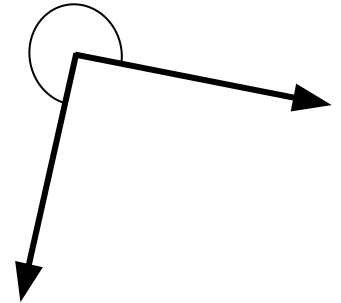
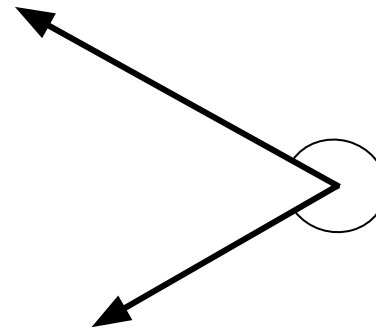
**Straight
Angle**

**Reflex
Angle**

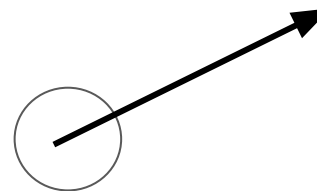
**Reflex
Angle**



**Reflex
Angle**



**Reflex
Angle**



**Full
Rotation**

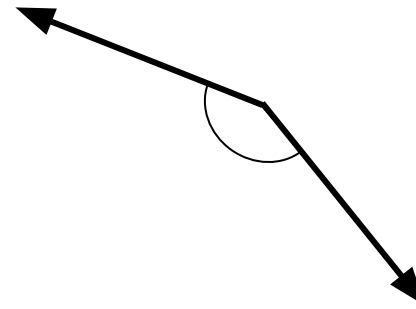
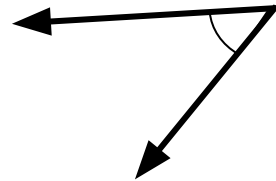
**Quarter
Turn**

32°

309°

**Half
Turn**

**Quarter
Turn**



180°

**Quarter
Turn**

90°

Whole Turn

**Half
Turn**

Angle Snap Rules

1. Shuffle the cards.
2. Deal out the cards between all of the players.
 - Players should not look at their cards.
3. Player 1 flips over a card and places it in the middle of the game.
4. Player 2 flips over a card and places it on top of Player 1's card.
5. Is it a match?
 - Yes: Anyone can snap! The player who snaps first gets to keep the cards in the pile.
 - No: The next player puts down their card.
6. The player with the most cards when time is called is the winner.

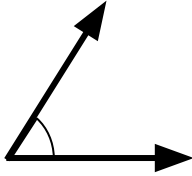
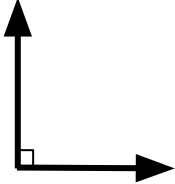
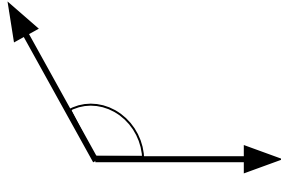

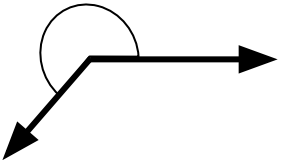
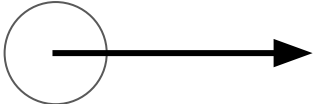
Angle Snap Rules

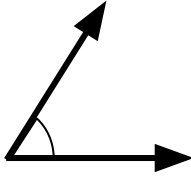
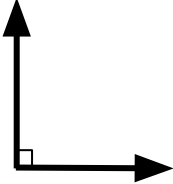
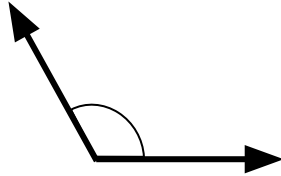

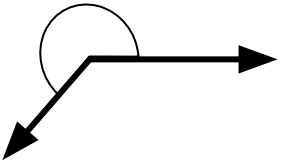
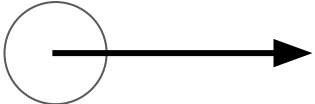
1. Shuffle the cards.
2. Deal out the cards between all of the players.
 - Players should not look at their cards.
3. Player 1 flips over a card and places it in the middle of the game.
4. Player 2 flips over a card and places it on top of Player 1's card.
5. Is it a match?
 - Yes: Anyone can snap! The player who snaps first gets to keep the cards in the pile.
 - No: The next player puts down their card.
6. The player with the most cards when time is called is the winner.

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Angle Cards

Acute Angle	Right Angle
	
Less than 90°	90°
Obtuse Angle	Straight Angle
	
Between 90° and 180°	180°
Reflex Angle	Full Rotation
	
Between 180° and 360°	360°

Acute Angle	Right Angle
	
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Obtuse Angle	Straight Angle
	
Between 90° and 180°	180°
Reflex Angle	Full Rotation
	
Between 180° and 360°	360°