

Lesson	Standards		
	Building Toward	Addressing	Building On
Unit 7, Lesson 1		4.G.1	
Unit 7, Lesson 2		4.G.1 4.NBT.B	
Unit 7, Lesson 3		4.G.1	
Unit 7, Lesson 4	4.G.2	4.G.1	
Unit 7, Lesson 5	4.MD.5	4.G.1 4.MD.5	
Unit 7, Lesson 6	4.MD.5.a	4.G.1 4.MD.5	
Unit 7, Lesson 7	4.MD.5.a	4.MD.5 4.MD.5.a	
Unit 7, Lesson 8	4.MD.5 4.MD.6 4.MD.7	4.MD.5.a 4.MD.7	4.NBT.1
Unit 7, Lesson 9		4.MD.5.a 4.MD.5.b 4.MD.6 4.MD.7 4.NBT.5	
Unit 7, Lesson 10		4.G.1 4.MD.5.b 4.MD.6 4.NBT.6	
Unit 7, Lesson 11		4.G.1 4.MD.5 4.MD.6 4.MD.7	
Unit 7, Lesson 12		4.G.1	4.NF.4.b
Unit 7, Lesson 13		4.MD.7	
Unit 7, Lesson 14		4.MD.6 4.MD.7	4.G.1
Unit 7, Lesson 15		4.G.1 4.MD.7	



Lesson	Standards		
	Building Toward	Addressing	Building On
Unit 7, Lesson 16		4.MD.6 4.MD.C	



Lesson	Instructional Routines	Materials to Gather	Materials to Copy	Suggested Centers
Unit 7, Lesson 1	<ul style="list-style-type: none"> <li>MLR2 Collect and Display</li> <li>Notice and Wonder</li> </ul>	<ul style="list-style-type: none"> <li>Chart paper: Activity 1</li> <li>Index cards: Activity 1</li> <li>Rulers or straightedges: Activity 1, Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Do You See What I See Cards (1 copy for every 4 students): Activity 1</li> </ul>	<ul style="list-style-type: none"> <li>Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</li> <li>Compare (1–5), Stage 8: Multi-Digit Operations (Supporting)</li> </ul>
Unit 7, Lesson 2	<ul style="list-style-type: none"> <li>Card Sort</li> <li>MLR7 Compare and Connect</li> <li>Number Talk</li> </ul>	<ul style="list-style-type: none"> <li>Rulers or straightedges: Activity 1, Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Card Sort: Who Am I Cards, Spanish (1 copy for every 2 students): Activity 1</li> </ul>	<ul style="list-style-type: none"> <li>Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</li> <li>Compare (1–5), Stage 8: Multi-Digit Operations (Supporting)</li> </ul>
Unit 7, Lesson 3	<ul style="list-style-type: none"> <li>How Many Do You See?</li> </ul>	<ul style="list-style-type: none"> <li>Rulers or straightedges: Activity 1, Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Illustrated Word Wall Handout, Spanish (1 copy for every 1 students): Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</li> <li>Compare (1–5), Stage 8: Multi-Digit Operations (Supporting)</li> </ul>
Unit 7, Lesson 4	<ul style="list-style-type: none"> <li>Which Three Go Together?</li> </ul>	<ul style="list-style-type: none"> <li>Materials from a previous lesson: Activity 1</li> <li>Rulers or straightedges: Activity 1, Activity 2</li> </ul>		<ul style="list-style-type: none"> <li>Rolling for Fractions (3–5), Stage 2: Multiply a Fraction by a Whole Number (Supporting)</li> <li>Compare (1–5), Stage 8: Multi-Digit Operations (Supporting)</li> </ul>
Unit 7, Lesson 5	<ul style="list-style-type: none"> <li>MLR1 Stronger and Clearer Each Time</li> <li>MLR2 Collect and Display</li> <li>Notice and Wonder</li> </ul>	<ul style="list-style-type: none"> <li>Rulers or straightedges: Activity 1, Activity 3</li> </ul>	<ul style="list-style-type: none"> <li>Tricky Figures Cards, Spanish (1 copy for every 8 students): Activity 1</li> </ul>	<ul style="list-style-type: none"> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> </ul>



Lesson	Instructional Routines	Materials to Gather	Materials to Copy	Suggested Centers
Unit 7, Lesson 6	<ul style="list-style-type: none"> <li>Card Sort</li> <li>MLR2 Collect and Display</li> <li>Which Three Go Together?</li> </ul>	<ul style="list-style-type: none"> <li>Materials from a previous activity: Activity 2</li> <li>Patty paper: Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Card Sort Angles Cards (1 copy for every 2 students): Activity 1</li> </ul>	<ul style="list-style-type: none"> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> </ul>
Unit 7, Lesson 7	<ul style="list-style-type: none"> <li>Notice and Wonder</li> </ul>	<ul style="list-style-type: none"> <li>Patty paper: Warm-up</li> <li>Rulers or straightedges: Activity 1</li> </ul>		<ul style="list-style-type: none"> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> </ul>
Unit 7, Lesson 8	<ul style="list-style-type: none"> <li>What Do You Know about ____?</li> </ul>	<ul style="list-style-type: none"> <li>Paper: Activity 2</li> <li>Rulers or straightedges: Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Making a Measuring Tool Template (1 copy for every 3 students): Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> </ul>
Unit 7, Lesson 9	<ul style="list-style-type: none"> <li>MLR1 Stronger and Clearer Each Time</li> <li>True or False?</li> </ul>	<ul style="list-style-type: none"> <li>Protractors: Activity 1</li> </ul>		<ul style="list-style-type: none"> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> </ul>
Unit 7, Lesson 10	<ul style="list-style-type: none"> <li>5 Practices</li> <li>MLR2 Collect and Display</li> <li>Number Talk</li> </ul>	<ul style="list-style-type: none"> <li>Protractors: Activity 1</li> <li>Rulers or straightedges: Activity 1, Activity 2</li> <li>Colored pencils: Activity 2</li> <li>Paper: Activity 2</li> </ul>		<ul style="list-style-type: none"> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> </ul>



Lesson	Instructional Routines	Materials to Gather	Materials to Copy	Suggested Centers
Unit 7, Lesson 11	<ul style="list-style-type: none"> <li>Estimation Exploration</li> </ul>	<ul style="list-style-type: none"> <li>Protractors: Activity 1, Activity 2</li> <li>Rulers or straightedges: Activity 1, Activity 2</li> <li>Index cards: Activity 2</li> </ul>		<ul style="list-style-type: none"> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> </ul>
Unit 7, Lesson 12	<ul style="list-style-type: none"> <li>MLR2 Collect and Display</li> <li>Number Talk</li> </ul>	<ul style="list-style-type: none"> <li>Materials from a previous lesson: Activity 1</li> <li>Protractors: Activity 2, Activity 3</li> <li>Pattern blocks: Activity 3</li> </ul>		<ul style="list-style-type: none"> <li>Which One? (K–5), Stage 4: Grade 3 Shapes (Supporting)</li> <li>Can You Draw It? (1–5), Stage 4: Area and Perimeter (Supporting)</li> </ul>
Unit 7, Lesson 13	<ul style="list-style-type: none"> <li>MLR5 Co-craft Questions</li> <li>Notice and Wonder</li> </ul>	<ul style="list-style-type: none"> <li>Patty paper: Activity 1</li> <li>Origami paper: Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>How Great Are These Angles Handout (1 copy for every 2 students): Activity 1</li> </ul>	<ul style="list-style-type: none"> <li>Target Measurements (2–5), Stage 4: Degrees (Addressing)</li> <li>Compare (1–5), Stage 6: Fractions (Supporting)</li> </ul>
Unit 7, Lesson 14	<ul style="list-style-type: none"> <li>MLR1 Stronger and Clearer Each Time</li> <li>Which Three Go Together?</li> </ul>	<ul style="list-style-type: none"> <li>Protractors: Activity 1, Activity 2</li> <li>Rulers or straightedges: Activity 1</li> </ul>		<ul style="list-style-type: none"> <li>Which One? (K–5), Stage 4: Grade 3 Shapes (Supporting)</li> <li>Can You Draw It? (1–5), Stage 4: Area and Perimeter (Supporting)</li> </ul>
Unit 7, Lesson 15	<ul style="list-style-type: none"> <li>How Many Do You See?</li> <li>MLR4 Information Gap</li> </ul>		<ul style="list-style-type: none"> <li>Info Gap A Whole Bunch of Angles Cards, Spanish (1 copy for every 2 students): Activity 2</li> </ul>	<ul style="list-style-type: none"> <li>Which One? (K–5), Stage 4: Grade 3 Shapes (Supporting)</li> <li>Can You Draw It? (1–5), Stage 4: Area and Perimeter (Supporting)</li> </ul>



Lesson	Instructional Routines	Materials to Gather	Materials to Copy	Suggested Centers
Unit 7, Lesson 16	<ul style="list-style-type: none"> <li>Notice and Wonder</li> </ul>	<ul style="list-style-type: none"> <li>Protractors: Activity 1, Activity 2</li> <li>Rulers or straightedges: Activity 1, Activity 2</li> <li>Grid paper: Activity 2</li> </ul>		<ul style="list-style-type: none"> <li>Which One? (K–5), Stage 4: Grade 3 Shapes (Addressing)</li> <li>Can You Draw It? (1–5), Stage 4: Area and Perimeter (Addressing)</li> </ul>



# ¿Cómo describirías estas figuras?

## Goals

- Describe (orally and in writing) geometric figures, using “point,” “line,” and “line segment” informally.

## Student Facing Learning Goals

- Dibujemos y describamos figuras geométricas.

## Required Preparation

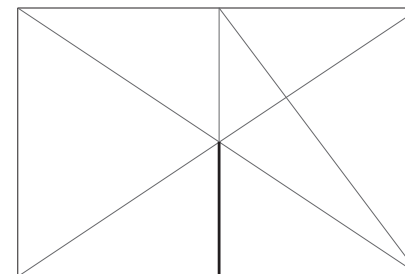
### Activity 2:

- Create a set of 4 cards from the blackline master for each group of 2 students.
- Create a poster with the two images shown in the *Activity Synthesis*.

### Lesson:

## Cool Down

Este es un dibujo en una tarjeta:



Escribe una descripción del dibujo que un compañero pueda usar para hacer una copia del dibujo.

## Responding to Student Thinking

Students describe the image only in terms of real-world objects (such as “there are 2 kite shapes”) or symbols (such as “two lines make a big X and one more line makes a letter A on the right side”).

**Next Day Supports**  
Launch the *Warm-up* or Activity 1 by highlighting key vocabulary from previous lessons.

The work of this lesson builds on the geometry concepts developed in a prior unit.

**Prior-Unit Support**  
Grado 3, Unit 7, Section A Razonemos con figuras

# Puntos, rectas, rayos y segmentos

## Goals

- Determine (orally) defining characteristics of lines, line segments, points, and rays.
- Draw line segments and rays.

## Student Facing Learning Goals

- Dibujemos puntos, rectas, segmentos de recta y rayos.

## Required Preparation

### Activity 2:

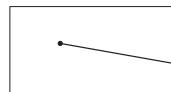
- Create a set of cards from the blackline master for each group of 2–4 students.

### Lesson:

## Cool Down

Decide si cada afirmación es verdadera o falsa. Si es falsa, corrígela.

1. Un punto marca un lugar.
2. Este es el dibujo de un rayo.



3. Una recta puede ser curva.
4. Este es un dibujo de un segmento.



5. La longitud de un rayo se puede medir.

## Responding to Student Thinking

Students recognize that some statements are false, but do not correct the statements.

**Next Day Supports**  
Launch the *Warm-up* or *Activity 1* by highlighting key vocabulary from previous lessons.

The work in this lesson builds from the geometry concepts developed in a prior unit.

**Prior-Unit Support**  
Grado 3, Unit 7, Section A Razonemos con figuras

# Dos o más rectas

## Goals

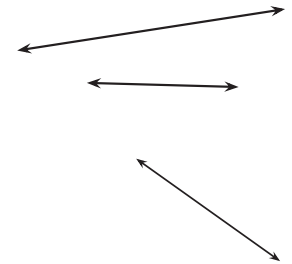
- Comprehend (in spoken and written language) the meaning of the terms “intersecting lines” and “parallel lines.”
- Explain (orally and in writing) how to determine if lines are intersecting or parallel.

## Student Facing Learning Goals

- Estudiemos rectas que se cruzan y rectas que no se cruzan.

## Cool Down

1. Explica por qué estas rectas no son paralelas.



2. Dibuja una recta que sea paralela a esta recta.

## Responding to Student Thinking

Students say the lines are parallel because they do not cross.

Next Day Supports  
Before the *Warm-up*, organize students into small groups to discuss a correct response to this *Cool-down*.

# Puntos y rectas por todas partes

## Goals

- Draw figures with parallel and intersecting lines.
- Identify (orally and in writing) parallel and intersecting lines in figures and drawings.

## Student Facing Learning Goals

- Encontramos rectas paralelas y rectas que se intersecan a nuestro alrededor.

## Required Preparation

### Activity 2:

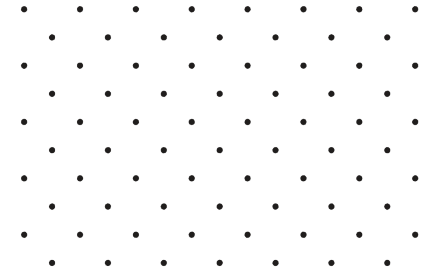
- Gather *Collect and Display* charts from previous lessons.
- Each student will need access to their personal word walls created in previous lessons.

## Cool Down

# F U N K I T E S

1. En la frase "FUN KITES" (en español, cometas divertidas), cuáles letras:
  - a. tienen segmentos paralelos
  - b. no tienen segmentos paralelos

2. Este es un campo de puntos. Úsalo para dibujar 2 pares de rectas paralelas. Cada par debe apuntar en una dirección diferente.



## Responding to Student Thinking

Students identify lines that are not parallel as being parallel.

Next Day Supports  
Launch the *Warm-up* or Activity 1 by highlighting important ideas from previous lessons.



# ¿Qué es un ángulo?

## Goals

- Comprehend (in spoken and written language) the meaning of the term “angle.”
- Identify (orally and in writing) angles in two-dimensional figures.

## Student Facing Learning Goals

- Busquemos ángulos y encontremos maneras de describirlos.

## Required Preparation

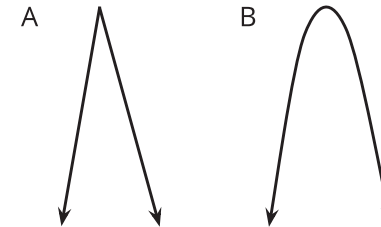
### Activity 2:

- Create a set of cards (4 cards total) for each group of 2 students from the blackline master.
- Each group of 2 students needs 2 cards (Sets 1 and 2). Additional cards (Sets 3A and 3B) can be used for extension.

### Lesson:

## Cool Down

1. Jada dice que la figura A muestra un ángulo, pero que la figura B no. ¿Estás de acuerdo? Explica tu razonamiento.



2. Marca los ángulos de cada letra y dibuja los rayos para mostrar cada ángulo.



## Responding to Student Thinking

Students say Figure B is an angle or identify some, but not all of the angles in the letter Y.

Next Day Supports  
Launch the *Warm-up* or the activities by highlighting important vocabulary from previous lessons.

# Comparemos y describamos ángulos

## Goals

- Compare and contrast (orally and in writing) angles.

## Student Facing Learning Goals

- Pensemos en cómo comparar y describir ángulos.

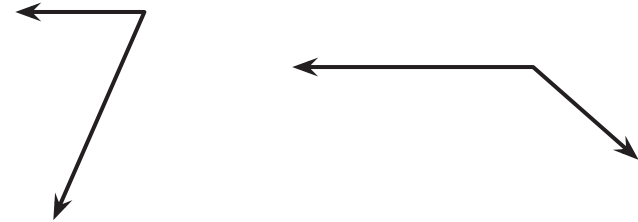
## Required Preparation

### Activity 2:

- Create one set of cards from the blackline master for each group of 2 students.

## Cool Down

Estos son dos ángulos.



1. Describe al menos una cosa en la que se parecen.
2. Describe al menos una cosa en la que son diferentes.

## Responding to Student Thinking

Students may describe one way the angles are the same or different but not both. Students may compare the angles without describing the rays.

### Next Day Supports

After the *Warm-up*, organize students into groups of 2 to discuss and add to their responses to this *Cool-down*.

# El tamaño de un ángulo en un reloj

## Goals

- Comprehend (in spoken language) the “size of angle” as the amount of turn one ray makes from another ray that is fixed at the same starting point.
- Use the features of an analog clock to describe (orally), and compare the sizes of angles.

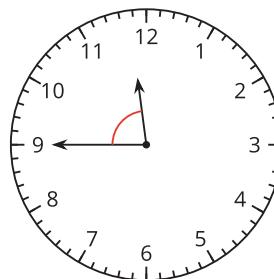
## Student Facing Learning Goals

- Describamos ángulos usando las manecillas de un reloj.

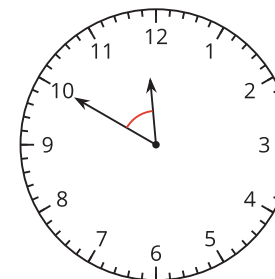
## Cool Down

Las manecillas de cada reloj forman un ángulo.

A



B



¿Cuál ángulo es mayor? ¿Cuánto mayor es ese ángulo que el otro? Explica cómo lo sabes.

## Responding to Student Thinking

Students determine the greater angle but do not use precise language to describe how much greater.

**Next Day Supports**  
Before the next day's *Warm-up*, organize students into small groups to discuss their responses.

# El tamaño de un ángulo, en grados

## Goals

- Comprehend (in spoken and written language) the meaning of the term “degree.”
- Use parts of a circle (halves, fourths) and benchmark angle measurements (such as  $90^\circ$ ,  $180^\circ$ ,  $270^\circ$ ,  $360^\circ$ ) to estimate the size of an angle, in degrees.

## Student Facing Learning Goals

- Usemos grados para describir el tamaño de un ángulo.

## Required Preparation

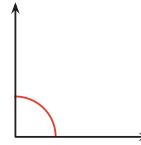
### Activity 3:

- Create a paper half circle from the blackline master for each student.

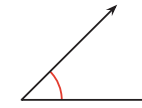
## Cool Down

Usa la herramienta que hiciste para estimar el tamaño de cada ángulo, en grados.

a



b



c



## Responding to Student Thinking

Students find angle measurements that are more than 5 degrees greater than or less than  $90^\circ$ ,  $45^\circ$ , or  $150^\circ$ .

Next Day Supports  
Launch Activity 1, with a discussion about this *Cool-down*.

# Usemos un transportador para medir ángulos

## Goals

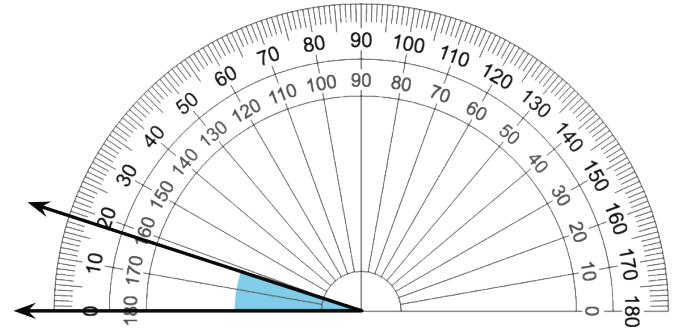
- Describe (orally and in writing) that 1 degree is a  $\frac{1}{360}$  turn through a full circle.
- Explain (orally) how to use a protractor to measure the size of an angle.

## Student Facing Learning Goals

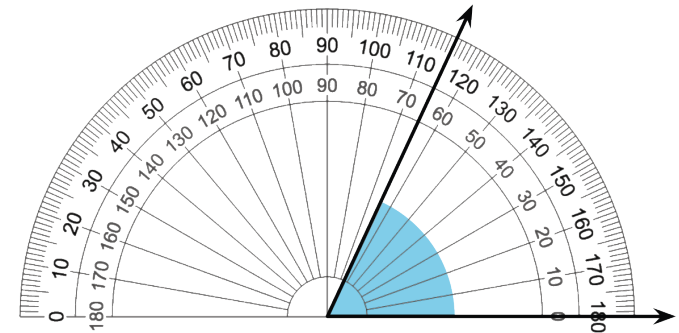
- Usemos algunas herramientas para medir ángulos.

## Cool Down

1. Un ángulo se compone de diecisiete ángulos de  $1^\circ$ . ¿Cuántos grados mide el ángulo?
2. ¿Cuál es la medida de cada ángulo?
  - a.



b.



## Responding to Student Thinking

Students find a measure other than  $17^\circ$ ,  $18^\circ$ , or  $65^\circ$ .

Next Day Supports

Launch the lesson by reviewing the use

of a protractor and how to read it.



# Rectas perpendiculares y medidas de ángulos

## Goals

- Comprehend (in spoken and written language) the meaning of “perpendicular lines.”
- Identify (orally) and draw perpendicular lines.

## Student Facing Learning Goals

- Midamos todo tipo de ángulos.

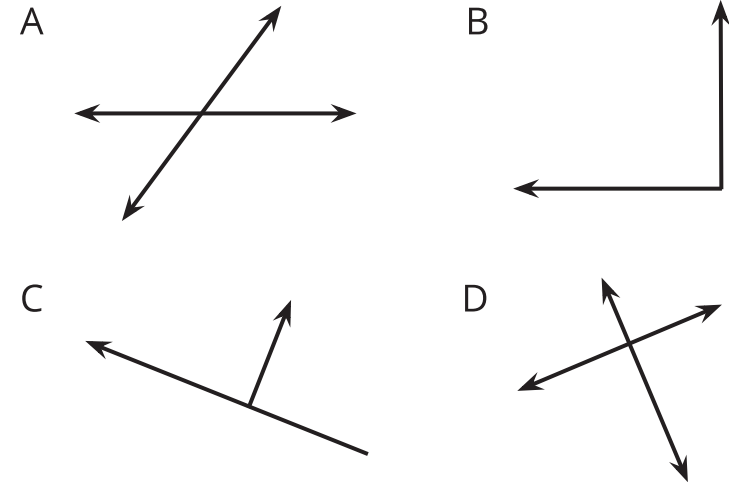
## Required Preparation

### Activity 3:

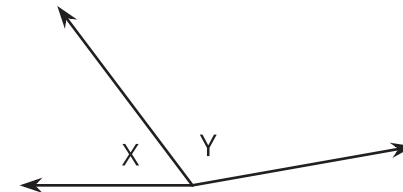
- Prepare at least 2 pieces of paper (or sticky notes) for each student.

## Cool Down

1. ¿Cuáles figuras muestran rectas o rayos perpendiculares?



2. Usa un transportador para medir los ángulos que están marcados en la figura.



## Responding to Student Thinking

Students identify Figure A as an example of perpendicular lines. Students find angle measurements other than  $53^\circ$  and  $117^\circ$ .

Next Day Supports  
Launch the *Warm-up* or Activity 1 by highlighting key vocabulary from previous lessons.

# Usemos un transportador para dibujar ángulos

## Goals

- Use a protractor to draw angles of given measurements.

## Student Facing Learning Goals

- Dibujemos algunos ángulos.

## Cool Down

1. Dibuja otro rayo que comience en el punto Z para crear un ángulo de  $25^\circ$ .
2. Dibuja dos rayos para crear un ángulo que mida  $165^\circ$ .



## Responding to Student Thinking

Students draw an angle that is greater than or less than required.

Next Day Supports  
Before the *Warm-up*, pass back the *Cool-down* and organize students into small groups to make corrections.

# Tipos de ángulos

## Goals

- Comprehend (in spoken and written language) the meaning of the terms "acute angle," "obtuse angle," "right angle," and "straight angle."
- Identify acute, obtuse, right, and straight angles in two-dimensional figures.

## Student Facing Learning Goals

- Examinemos diferentes tipos de ángulos.

## Required Preparation

### Activity 2:

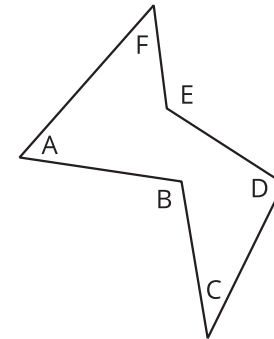
- Students need their angle cards from the previous lesson.

## Cool Down

1. Este es un rayo. Dibuja otro rayo desde el punto  $P$  para formar un ángulo agudo.



2. Estos son unos ángulos marcados. Identifica todos los ángulos que son obtusos.



3. Un ángulo está formado por cuatro ángulos de  $35^\circ$ . ¿Ese ángulo es un ángulo llano? Explica cómo lo sabes.

## Responding to Student Thinking

Students may recognize that "obtuse" and "acute" refer to angles that are greater than and less than  $90^\circ$  but get

Next Day Supports  
Launch the *Warm-up* or Activity 1 by highlighting key vocabulary from previous lessons.



the terms reversed.



# Encontremos medidas de ángulos

## Goals

- Explain (orally and in writing) strategies for determining the size of an angle, based on composing and decomposing angles.

## Student Facing Learning Goals

- Compongamos y descompongamos ángulos para encontrar sus medidas.

## Required Preparation

### Activity 2:

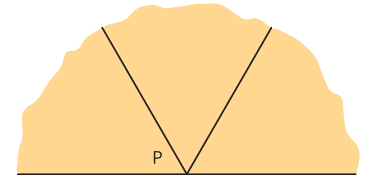
- Each group of 2–4 students needs one copy of the handout from the blackline master.
- Cut out the 4 copies of each angle (P, Q, R, and S) in advance, or prepare scissors and extra time for students to cut out the angles from the handout.
- If using patty paper instead of cutouts of the angles, each student needs 1–2 sheets of patty paper.

### Lesson:

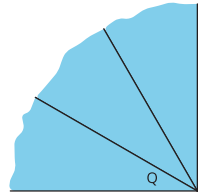
## Cool Down

Noah recorta 3 copias del ángulo P y 3 copias del ángulo Q. Él las organiza una al lado de la otra.

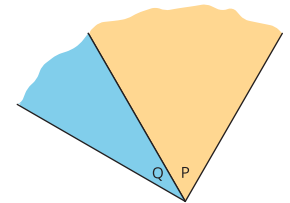
1. Tres copias del ángulo P forman una línea recta. ¿Cuántos grados mide el ángulo P? Explica o muestra cómo razonaste.



2. Tres copias del ángulo Q (blue) forman un ángulo recto. ¿Cuántos grados mide el ángulo Q? Explica o muestra cómo razonaste.



3. Noah pone el ángulo P junto al ángulo Q. ¿Cuántos grados mide el ángulo que se forma? Explica o muestra cómo razonaste.



## Responding to Student Thinking

Students may compose angles in ways that do not result in the correct answer.

### Next Day Supports

During each *Activity Synthesis*, connect diagrams to expressions or equations.

# Razonemos sobre ángulos (parte 1)

## Goals

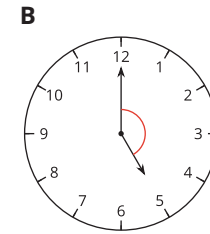
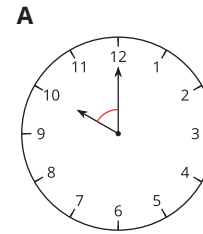
- Explain (orally and in writing) strategies for determining the size of an angle within a circle.

## Student Facing Learning Goals

- Encontramos el tamaño de un ángulo que está en el reloj.

## Cool Down

¿Cuántos grados mide cada uno de los ángulos que están marcados en el reloj? Explica o muestra cómo razonaste.



## Responding to Student Thinking

Students may mistake the angle between two consecutive numbers to be  $5^\circ$  because that space represents 5 minutes of elapsed time.

**Next Day Supports**  
Before the *Warm-up*, select the *Cool-down* of several students from the previous lesson (names anonymous). Ask students to identify what was done well and what needs to be improved in each *Cool-down*.

# Razonemos sobre ángulos (parte 2)

## Goals

- Determine the information needed to solve a problem with an unknown angle measurement. Ask (orally) questions to elicit that information.
- Represent angle relationships, with an equation, using a symbol for an unknown angle measurement, and calculate an unknown angle measurement.

## Student Facing Learning Goals

- Averigüemos las medidas de algunos ángulos desconocidos.

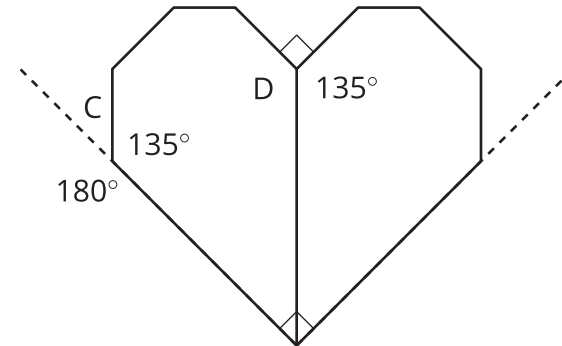
## Required Preparation

### Activity 3:

- Create a set of cards from the blackline master for each group of 2 students.

## Cool Down

Encuentra las medidas de los ángulos que están marcados. Muestra cómo razonaste.



## Responding to Student Thinking

Students may not find the values of C or D if they don't recall that a full turn around a point makes a  $360^\circ$  angle.

### Next Day Supports

Before the *Warm-up*, organize students into groups of 2 to discuss a correct response to this *Cool-down*.

# Ángulos, calles y escaleras

## Goals

- Explain (orally) strategies for representing and solving problems involving angle measurement.

## Student Facing Learning Goals

- Investiguemos calles y escaleras.