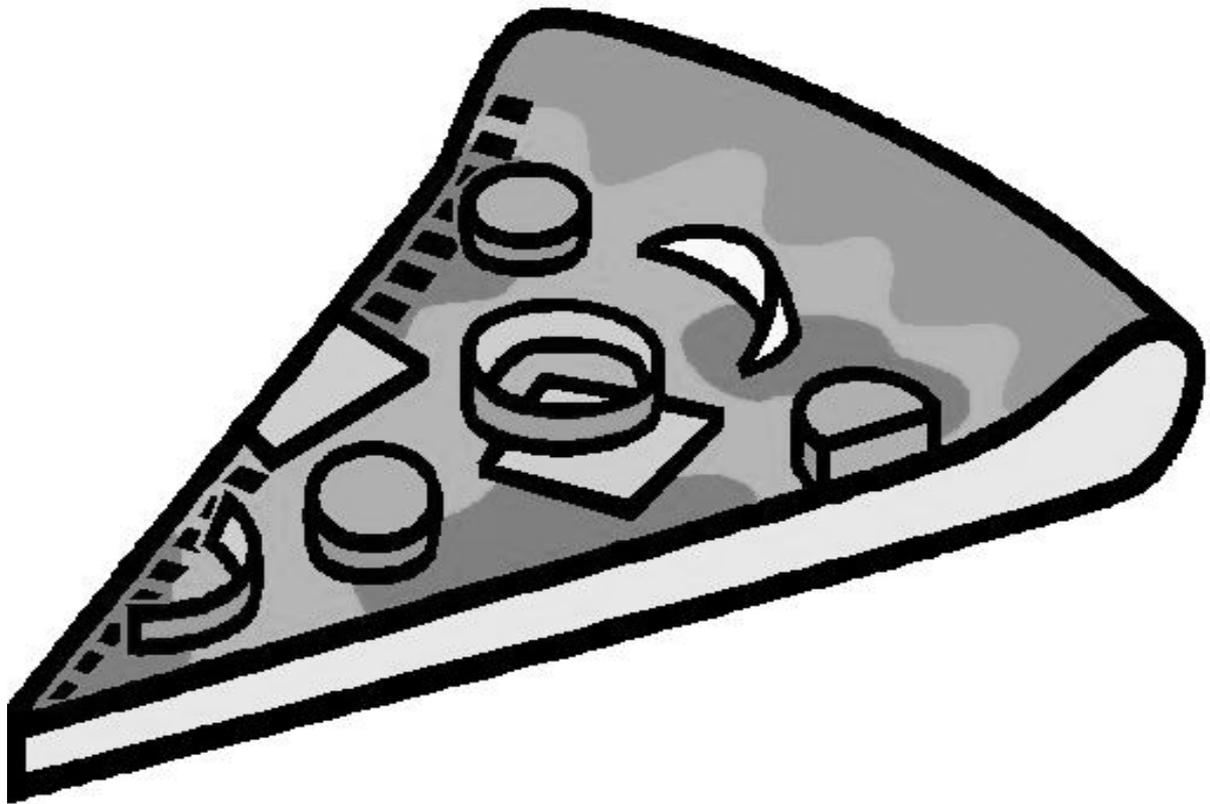


Las fracciones

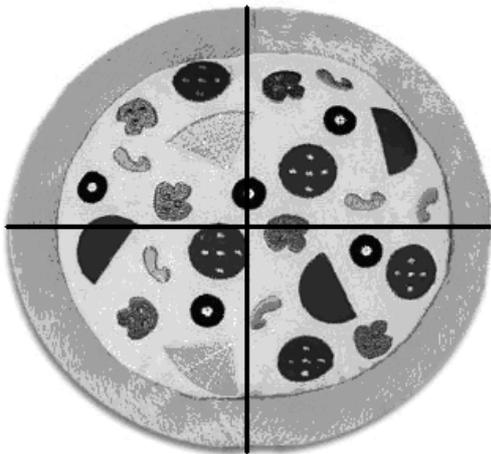
(Representación gráfica y denominación)



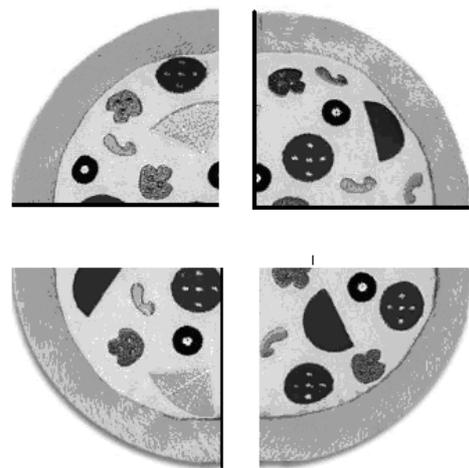
(Imágenes algunos ejercicios modificadas tomadas de WWW.ACTILUDIS)

- Ahora imagina que tuvieras que repartir una Pizza con cuatro amigos, en cuatro trozos, en cuatro porciones, en cuatro fracciones.
- Todos quieren que les toque lo mismo que a los demás.
- Todos quieren la misma cantidad.
- Para eso usamos las matemáticas, las fracciones, y repartimos la pizza en 4 trozos iguales.

- Antes de cortarla



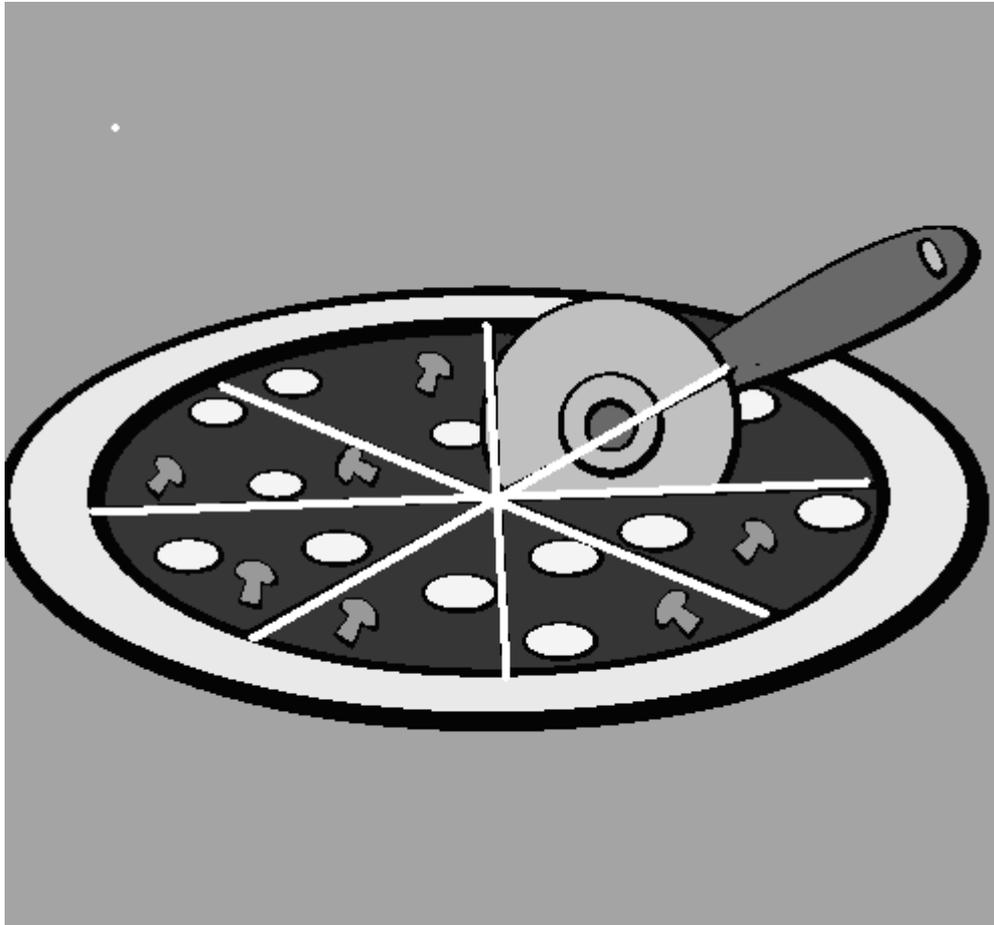
- Una vez cortada



- Es decir tenemos 1 pizza cortada en 4 partes iguales



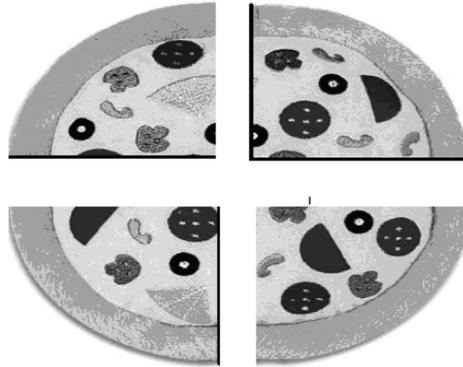
- Ahora mira este dibujo y dime en cuántas partes iguales está cortada la pizza.



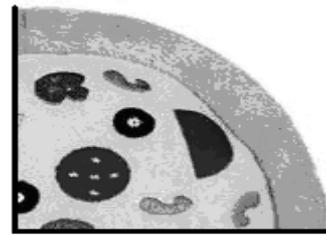
- Es decir tenemos 1 pizza cortada en trozos iguales.

Ahora volvamos a la primera pizza, si nadie se la ha comido...

1 pizza cortada en 4 trozos iguales



Vamos a coger un trozo



¿Sabes cómo representamos este trozo igual al resto en matemáticas?

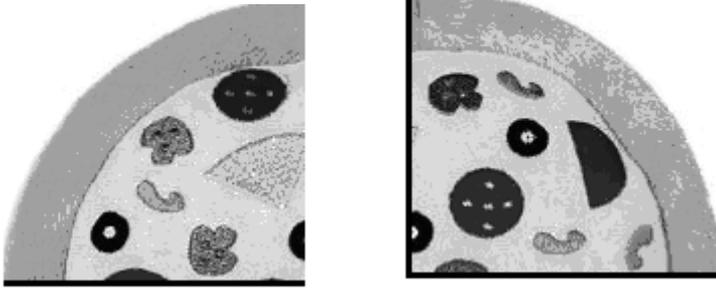
Lo representamos así:

$$\frac{1}{4}$$

Es decir que hemos cogido una parte (1) de cuatro (4) iguales.

Arriba ponemos siempre las partes que cogemos, y abajo el total de partes que había.

Si hubiéramos cogido dos partes:



- Lo escribiríamos así:

$$\frac{2}{4}$$

- Es decir que hemos cogido dos partes (2) de cuatro (4) partes iguales

- Arriba ponemos siempre las partes que cogemos: 2
- Abajo el total de partes que había: 4

A la parte de arriba la llamamos

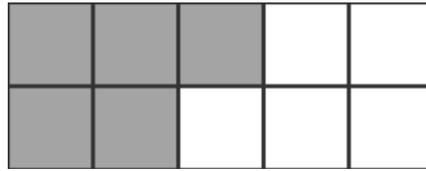
NUMERADOR

A la parte de abajo la llamamos

DENOMINADOR



- Ahora mira esta tableta de chocolate



¿Cuántas partes hemos cogido?: _____ (Numerador)

¿Cuántas partes hay en total?: _____ (Denominador)

Ahora pon las partes que hemos cogido arriba de la línea ----- _____

Las partes que había en total debajo de la línea -----

- Ahora mira esta otra tableta de chocolate



¿Cuántas partes hemos cogido?: _____

¿Cuántas partes hay en total?: _____

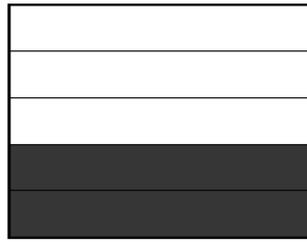
- Ahora esta otra figura



¿Cuántas partes hemos cogido?: _____

¿Cuántas partes hay en total?: _____

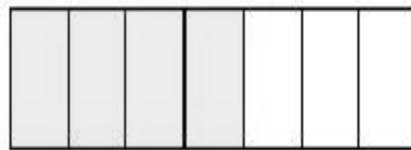
• Otra figura



¿Cuántas partes hemos cogido?: _____

¿Cuántas partes hay en total?: _____

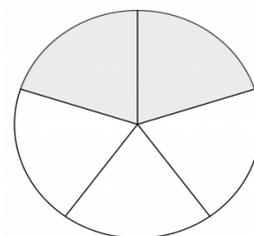
• Otra figura



¿Cuántas partes hemos cogido?: _____

¿Cuántas partes hay en total?: _____

• Otra figura



¿Cuántas partes hemos cogido?: _____

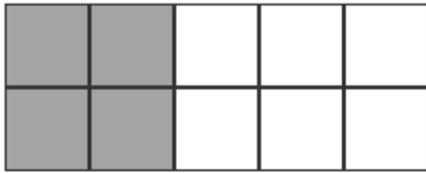
¿Cuántas partes hay en total?: _____



Ahora a ver si eres capaz de poner

- ¿Cuántas partes hemos cogido? (Arriba)
- ¿Cuántas partes hay en total? (Abajo)

En las siguientes figuras:

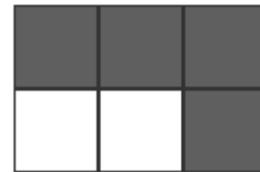


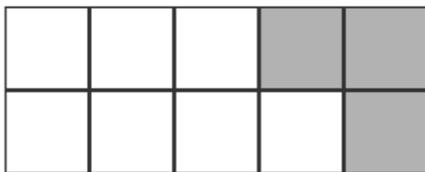








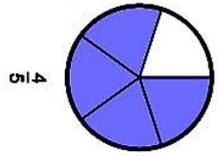




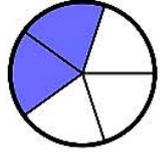




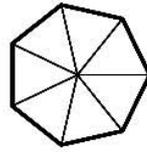
FRACCIONES



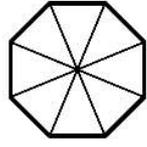
$\frac{4}{5}$



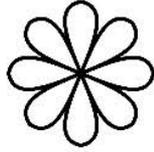
$\frac{2}{5}$



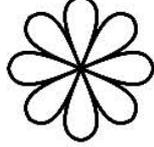
$\frac{4}{7}$



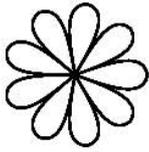
$\frac{4}{8}$



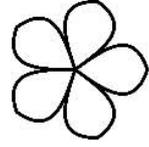
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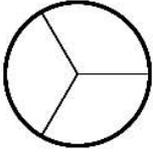
$\frac{6}{8}$



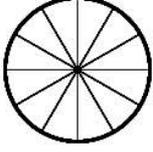
$\frac{1}{9}$



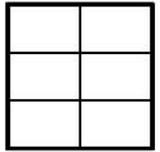
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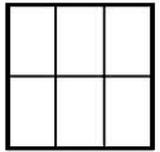
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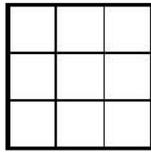
$\frac{2}{12}$



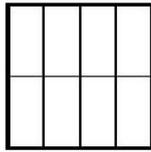
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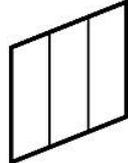
$\frac{5}{6}$



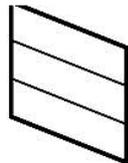
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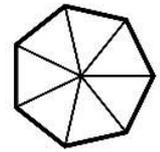
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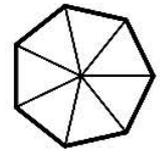
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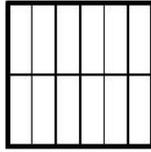
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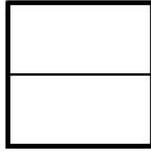
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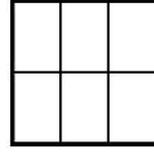
$\frac{3}{7}$



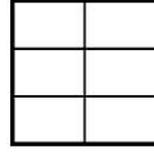
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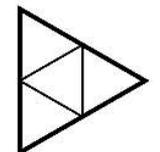
$\frac{1}{2}$



$\frac{5}{6}$



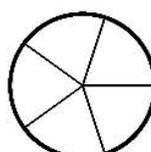
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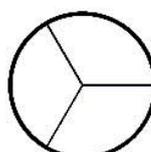
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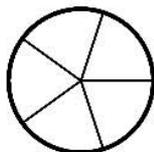
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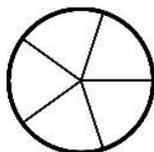
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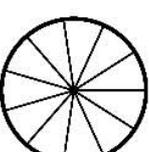
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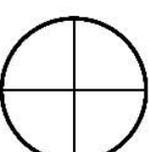
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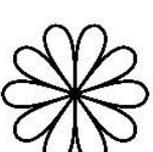
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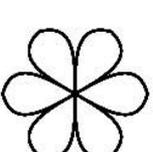
$\frac{2}{11}$



$\frac{2}{4}$



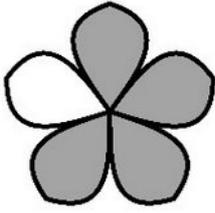
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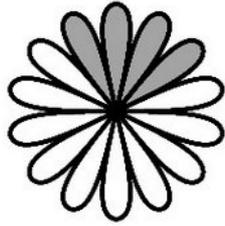


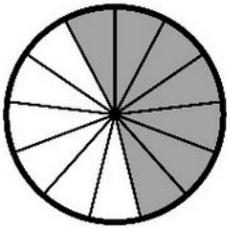
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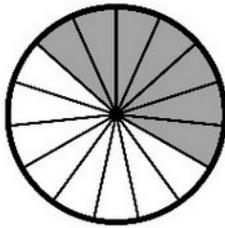


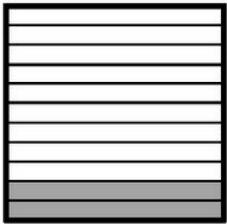
Escribe las fracciones que representan los dibujos

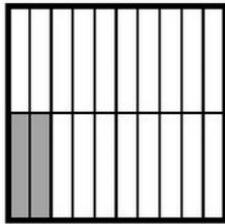


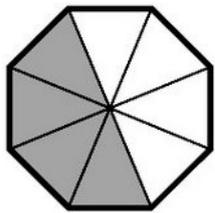


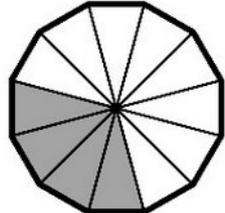


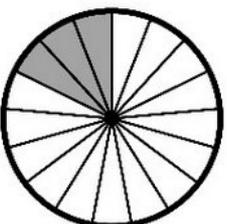


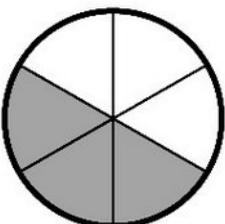


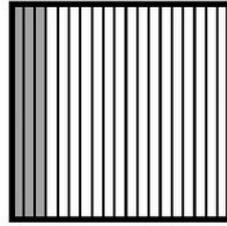


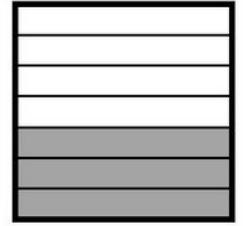


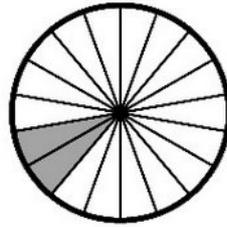


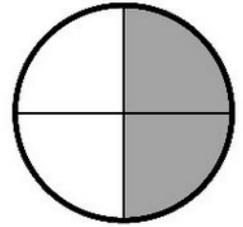


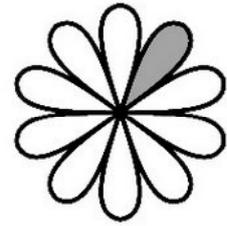


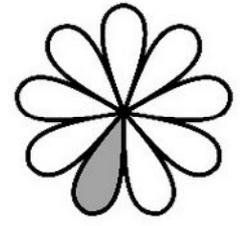




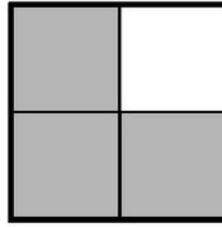


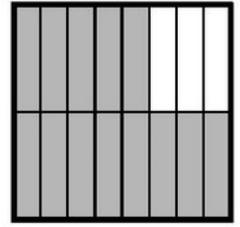


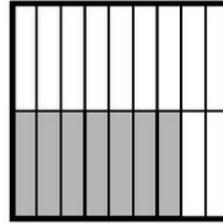


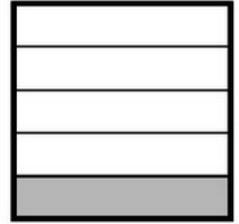


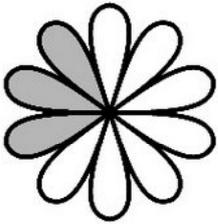


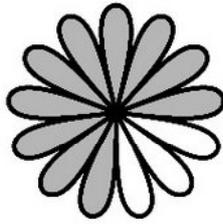


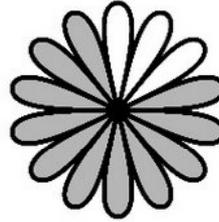


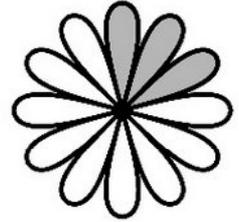


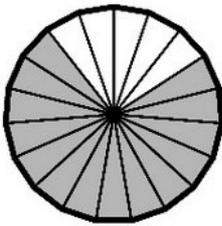


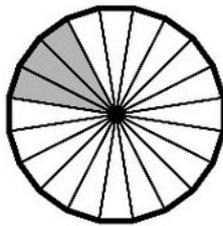


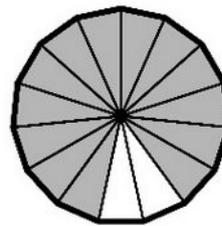


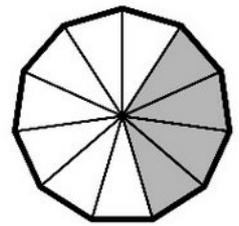


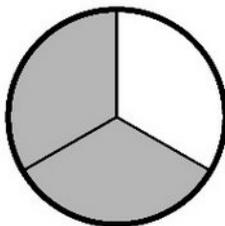


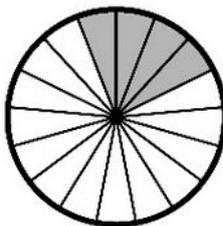


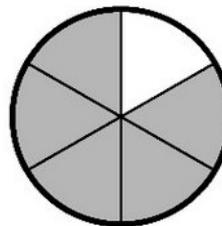


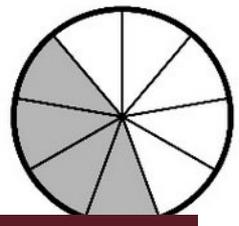






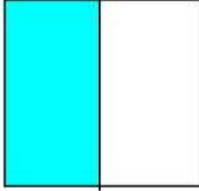
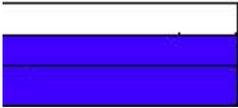
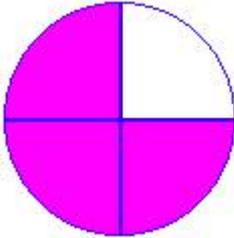
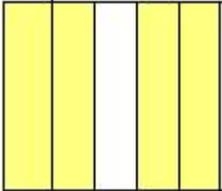
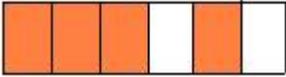
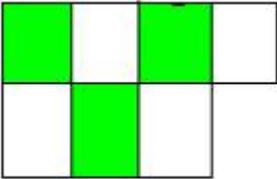


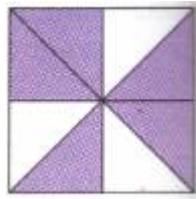




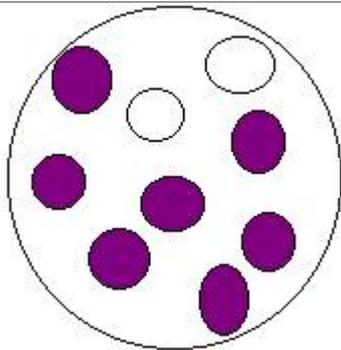
Lectura de fracciones

Fíjate cómo se leen las siguientes fracciones

	<table border="1"> <tbody> <tr> <td>1</td> <td>Un</td> </tr> <tr> <td>2</td> <td>Medio</td> </tr> </tbody> </table>	1	Un	2	Medio
1	Un				
2	Medio				
	<table border="1"> <tbody> <tr> <td>2</td> <td>Dos</td> </tr> <tr> <td>3</td> <td>Tercios</td> </tr> </tbody> </table>	2	Dos	3	Tercios
2	Dos				
3	Tercios				
	<table border="1"> <tbody> <tr> <td>3</td> <td>Tres</td> </tr> <tr> <td>4</td> <td>Cuartos</td> </tr> </tbody> </table>	3	Tres	4	Cuartos
3	Tres				
4	Cuartos				
	<table border="1"> <tbody> <tr> <td>4</td> <td>Cuatro</td> </tr> <tr> <td>5</td> <td>Quintos</td> </tr> </tbody> </table>	4	Cuatro	5	Quintos
4	Cuatro				
5	Quintos				
	<table border="1"> <tbody> <tr> <td>4</td> <td>Cuatro</td> </tr> <tr> <td>6</td> <td>Sextos</td> </tr> </tbody> </table>	4	Cuatro	6	Sextos
4	Cuatro				
6	Sextos				
	<table border="1"> <tbody> <tr> <td>3</td> <td>Tres</td> </tr> <tr> <td>7</td> <td>Séptimos</td> </tr> </tbody> </table>	3	Tres	7	Séptimos
3	Tres				
7	Séptimos				



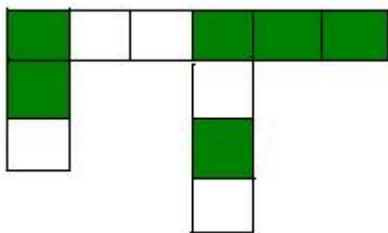
5	Cinco
8	Octavos



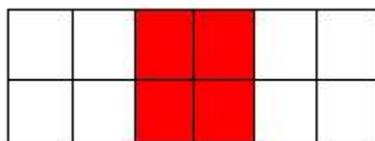
7	Siete
9	Novenos



6	Seis
10	Décimos



6	Seis
11	Onceavos



4	Cuatro
12	Doceavos

- El número que está arriba (**Numerador**) se lee tal cual:
un, dos, tres, cuatro...

- El que está abajo (**Denominador**)

Cuando el denominador va de 2 a 10

Si es 2 se lee medios

Si es 3 se lee tercios

Si es 4 se lee "cuartos"

Si es 5 se lee quintos

Si es 6 se lee sextos

Si es 7 se lee séptimos

Si es 8 se lee octavos

Si es 9 se lee novenos

Si es 10 se lee décimos

Cuando es mayor que 10 se le agrega al número la terminación
"avos"

11 onceavos

12 doceavos

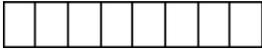
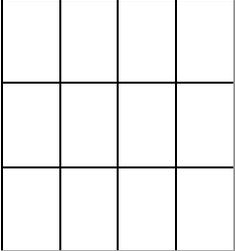
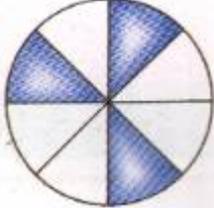
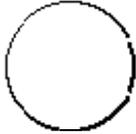
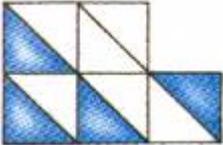
13 treceavos

14 catorceavos

...



Completa el siguiente cuadro:

Nombre	Dibujo	Numerador	Denominador	Fracción
Tres octavos		3	8	$\frac{3}{8}$
Cinco doceavos				$\frac{\quad}{\quad}$
		7	10	$\frac{\quad}{\quad}$
				$\frac{\quad}{\quad}$
				$\frac{\quad}{\quad}$
Un medio				$\frac{\quad}{\quad}$
				$\frac{\quad}{\quad}$
				$\frac{\quad}{\quad}$

Ahora vamos a ver fracciones en usos prácticos

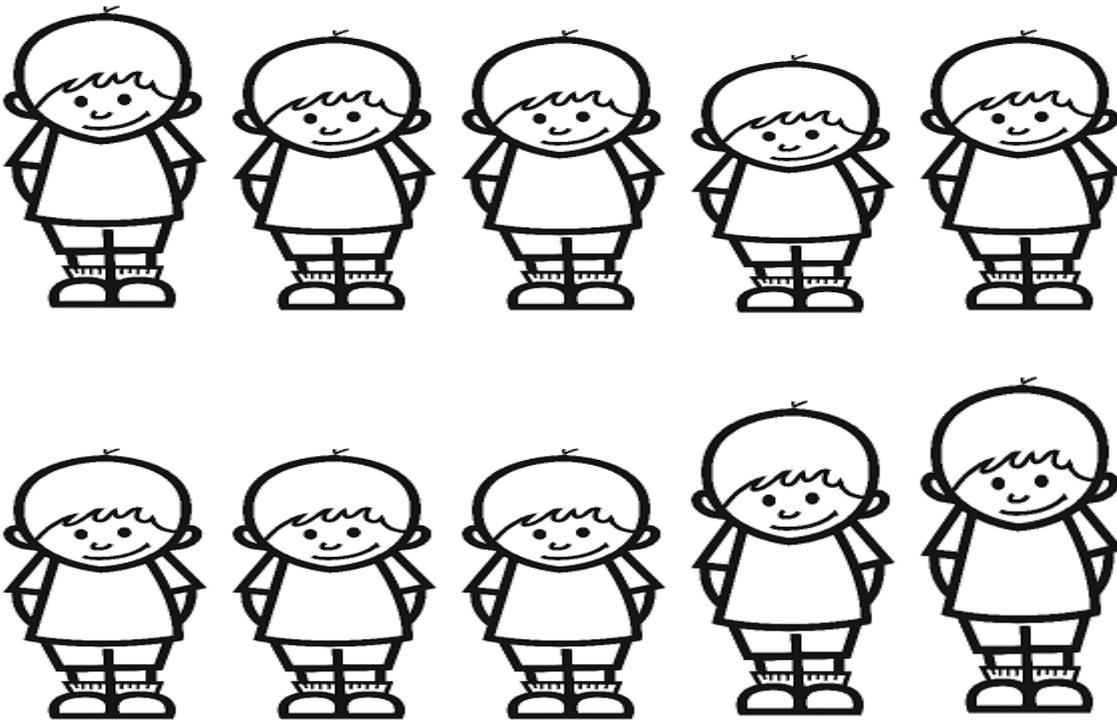
- En una clase hay 10 niños

2 son rubios

3 son morenos

4 son castaños

- Ahora píntalos

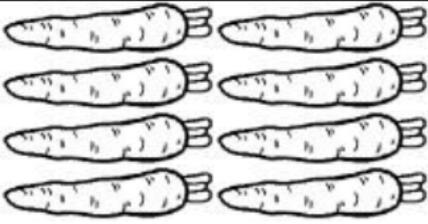


- Ahora representa por medio de fracciones lo que has pintado:

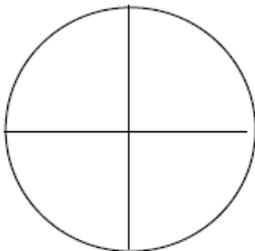
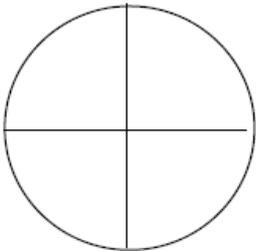
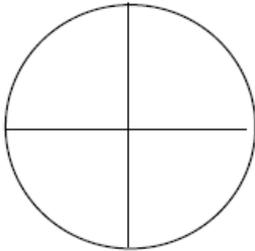
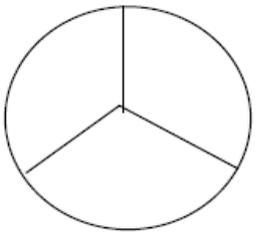
Rubios: ____

Morenos: ____

Castaños: ____

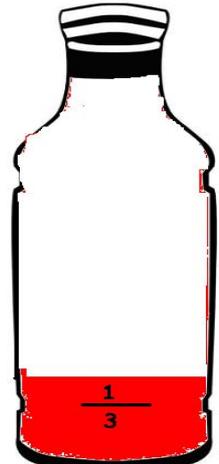
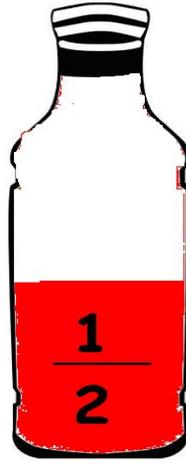
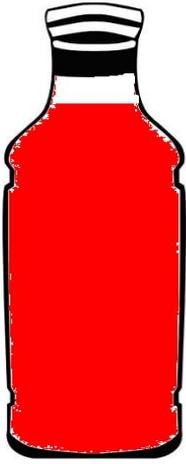
 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> — </div>	 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> — </div>
<p>Pinta 5 zanahorias y escribe la fracción</p>	<p>Pinta 3 tartas y escribe la fracción</p>
 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> — </div>	 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> — </div>
<p>Pinta 3 monigotes y escribe la fracción</p>	<p>Pinta 3 vasos y escribe la fracción</p>

Coge el trozo o los trozos de pizza que te indica la fracción

 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> $\frac{2}{4}$ </div>	 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> $\frac{1}{4}$ </div>
 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> $\frac{3}{4}$ </div>	 <div style="border: 1px solid black; width: 80px; height: 80px; margin-left: 20px; display: flex; align-items: center; justify-content: center;"> $\frac{1}{3}$ </div>

Observa estas botellas

1

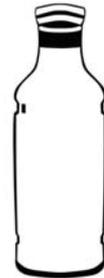


Ahora dibuja según la fracción

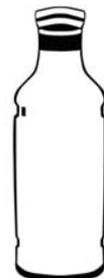
- La botella está llena $1/1$



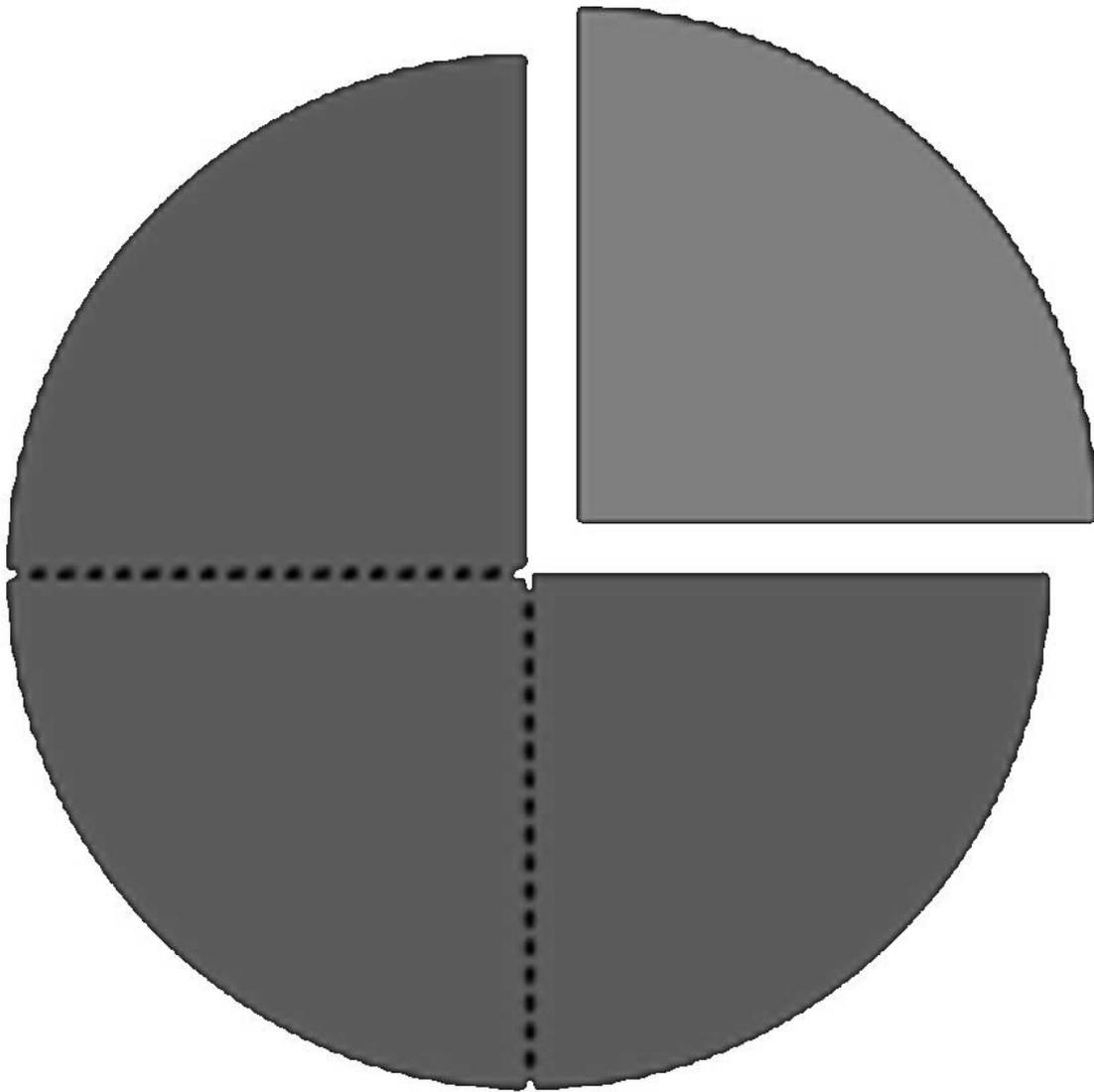
- La botella está a la mitad $1/2$



La botella está en su tercera parte $1/3$



Un modelo físico para recortar y jugar a las fracciones



Repasamos las fracciones en Internet (dar al play):

<http://roble.pntic.mec.es/~jblesa/matematicas/temas/4/unidad3/peli3.swf>

