



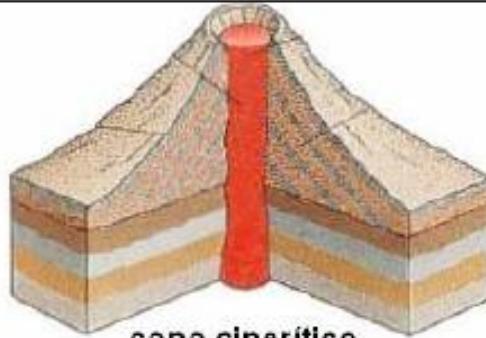
# Vulcanismo

M.C. Alba L. Martínez Haros

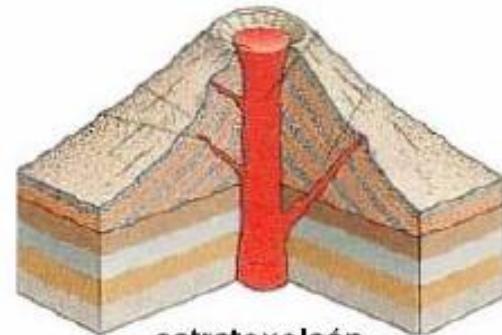
# Tipos de Volcanes



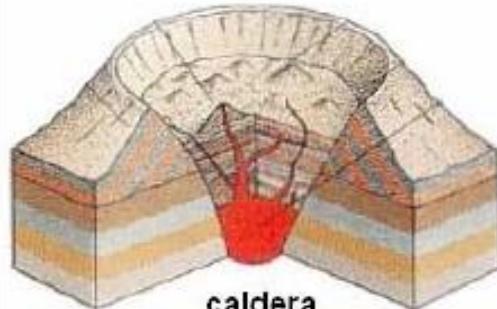
volcán escudo



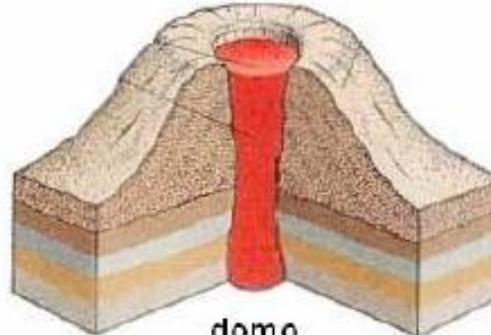
cono cinerítico



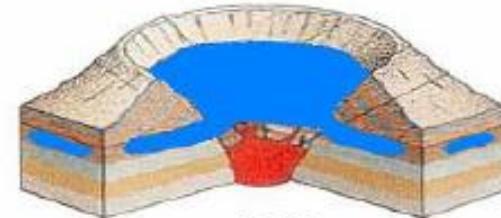
estratovolcán



caldera



domo



maar



# Volcán Escudo



Isla Tortuga

Caldera



Caldera Aniakchak, Alaska.

# Cono cinerítico



Paricutín

Maar



# Estratovolcán



Santa Elena

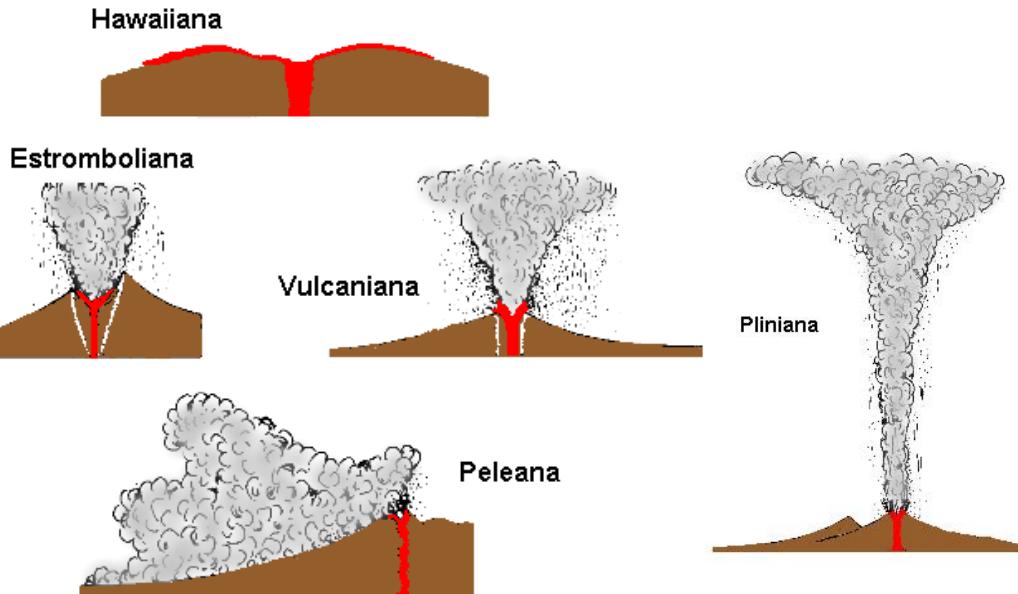
Domo



Mt. Rainier



# Tipos de Erupciones



Tipo de erupción	Actividad efusiva	Explosividad
Hawaiana	Lavas extensas a partir de fisuras	Baja
Estromboliana	Lavas escasas, poco extensas	Variable
Vulcaniana	Lavas escasas, piroclastos abundantes	Moderada a violenta
Pliniana Y Peleana	Piroclastos y domos	Muy violenta



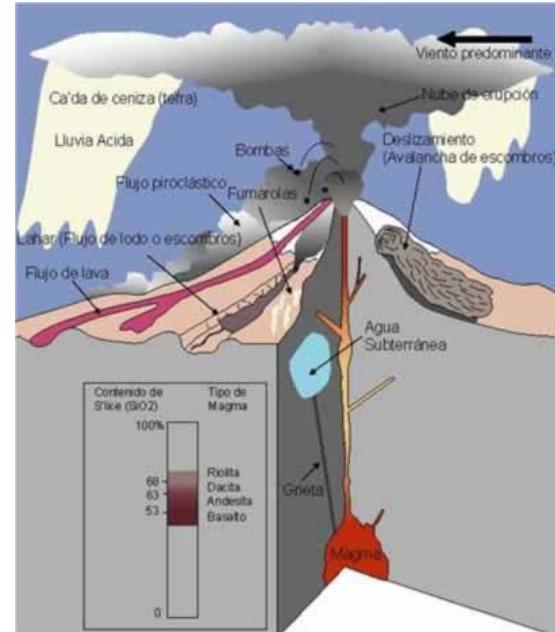
Tipo de erupción	Ejemplos	Magma	Actividad efusiva	Explosividad	Tipo de volcanes
Hawaiana	Mauna Loa	Caliente (más de 1200°C) baja viscosidad	Lavas extensas a partir de fisuras	Baja	Volcanes escudo, planicies lávicas y erupciones fisurales
Estromboliana	Stromboli y Paricutín	Intermedio, mixto, viscosidad moderada	Lavas escasas, poco extensas	Variable	Conos de lavas y cenizas abruptos
Vulcaniana	Vesubio	Frio (menos de 900°C), viscoso	Lavas escasas, piroclastos abundantes	Moderada a violenta	Estratovolcanes y calderas
Pliniana Y Peleana	Pinatubo y St. Helen	Frio (menos de 900°C), muy viscoso	Piroclastos y domos	Muy violenta	Estratovolcanes y calderas



# Peligros Volcánicos

En la Guía Básica para la Elaboración de Atlas Estatales y Municipales de Peligros y Riesgos, (Martínez et. al, 2004) se establecen los siguientes productos volcánicos como posibles fuentes de amenaza a la población:

- Cenizas volcánicas
- Flujos Piroclásticos
- Lahares
- Ondas de presión o de choque
- Derrumbe y avalanchas
- Flujos de lava
- Gases volcánicos
- Sismos volcánicos
- Tsunamis



# Las peores erupciones volcánicas del siglo XX



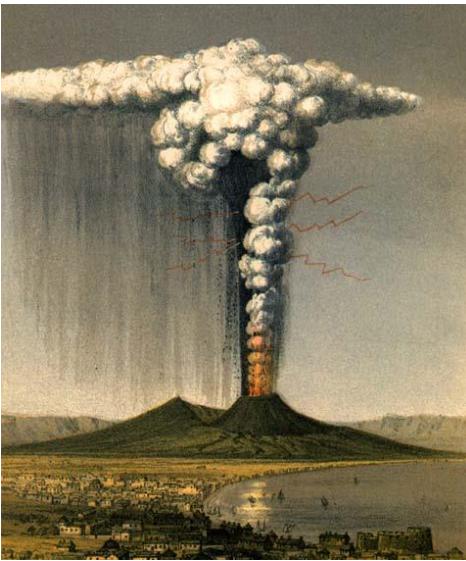
# Santorini

Isla de Santorini, Grecia. Su erupción en 1650 a.C. produjo olas superiores a los 200 m que golpearon la costa de Creta, causando una violenta devastación y una gran crisis en la civilización minoica



# Vesubio

- Italia. En el año 79 d.C., la erupción del Vesubio cubrió de cenizas la ciudad de Pompeya y de fango las de Herculano y Stabias. La lluvia de cenizas húmedas formó un sello hermético sobre la ciudad conservando muchas estructuras públicas, templos, teatros, casas privadas y cadáveres.





# Vesubio

Posteriormente se producirían multitud de erupciones de graves consecuencias. La mayor del siglo XX se produjo el 17 marzo de 1944, destruyendo las poblaciones de San Sebastiano al Vesuvio, Massa di Somma y parte de San Giorgio en Cremano, mientras la Segunda Guerra Mundial rugía en Italia.



# Tambora

Indonesia. En abril de 1815 el volcán entró en erupción y sus 4330 m de altura sobre el nivel del mar quedaron reducidos a 2850. La nube de cenizas se expandió a más de 600 km de distancia, la precipitación de cenizas cubrió zonas en un radio de 500.000 km<sup>2</sup> con un espesor de 3 m. en Francia la capa de cenizas fue de 1 cm. El ruido de la explosión se escuchó a más de 1500 km de distancia, los piroclastos y las nubes de ceniza mataron a 12.000 personas y debido a la hambruna provocada por la devastación de las cosechas murieron más de 49000, en las islas cercanas.



# Krakatoa

Sumatra, Indonesia. El 27 de agosto de 1883, el volcán Krakatoa entra en erupción, provocando la desaparición casi total de la isla situada en el estrecho de Java y Sumatra. El ruido provocado por la explosión se pudo oír a unos 4800 km de distancia. Murieron más de 40.000 personas por los tsunamis de hasta 35 m de altura provocados por la erupción, levanto una columna eruptiva de 40 km, cuyas cenizas giraron varios años en torno a la Tierra.



40 años después de lo ocurrido se formó otro volcán, al que se le llama “el hijo de Krakatoa”, cuenta aproximadamente con más de 400 metros y ya ha sufrido alguna erupción.



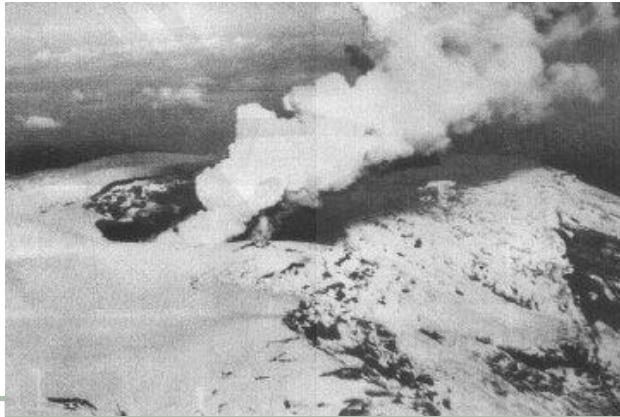
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# Armero Colombia

En noviembre de 1985 tuvo lugar la erupción del volcán Nevado del Ruíz, provocando una avalancha de lahar (fango volcánico) pues se derritieron las nieves eternas que había en su cumbre. Causó 23.000 víctimas y la desaparición total de la población de Armero arrasada por la avalancha y el desborde de las cuencas del río Lagunillas.



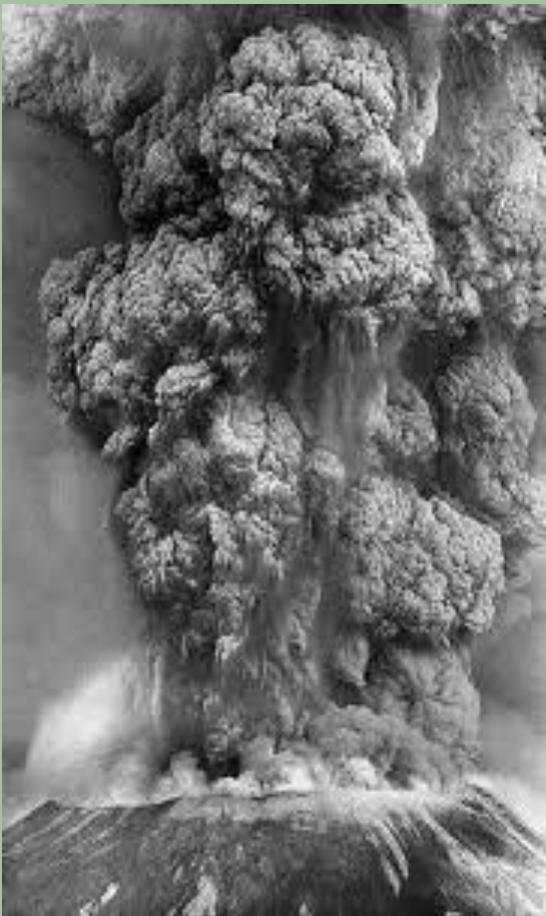


# Mt. Santa elena



Washington, EUA, 19 de Mayo de 1980. Una gigantesca explosión arrancó parte de la cumbre de la montaña reduciéndola a fragmentos; la energía liberada fue igual a la de 27.000 bombas nucleares como la de Hiroshima. Al hacer erupción toda la tierra y nieve que había en gran parte de el se deslizó hasta llegar al lago Spirit y causo un megatsunami de 250 metros de altura, fue el deslizamiento mas grande registrado en la historia.





# Pinatubo

Monte Pinatubo Filipinas, junio de 1991.

Una nube ardiente viajo a gran velocidad, con una enorme fuerza destructiva y temperaturas entre 350 C° y 1000 C° arrasó todo lo que encontraba a su paso. Gases venenosos con ondas expansivas de trayectoria y flujos piroclásticos de trayectoria balística que junto a coladas de barro, con temperaturas de 8,000 °C crearon un paisaje. El flujo piroclástico, las cenizas y los deslizamientos de tierra y lava provocaron cuantiosos daños materiales y económicos. Aumento del nivel del mar y cambios de temperatura.





# Popocatépetl

Ha sido uno de los volcanes más activos de México. Desde 1354 se han registrado 18 erupciones. En 1947 ocurrió una erupción de consideración, para iniciar así un periodo de actividad. El 21 de diciembre de 1994 registró una explosión que produjo gas y cenizas que fueron transportados por los vientos dominantes a más de 25 km de distancia. Actualmente su actividad es moderada, pero constante, con emisión de fumarolas, compuestas de gases y vapor de agua, y repentinas e imprevistas expulsiones menores de ceniza y material volcánico. La última erupción violenta del volcán se registró en diciembre de 2000. El 25 de diciembre de 2005 se produjo en el cráter del volcán una nueva explosión, que provocó una columna de humo y cenizas de tres kilómetros de altura y la expulsión de lava.







# Volcán de fuego

Colima. A lo largo de 500 años el volcán ha tenido más de 40 explosiones desde 1576, de las cuales destacan las de 1585, 1606, 1622, 1690, 1818, 1890, 1903, la más violenta la de 1913, febrero de 1999, 6 de junio del 2005, se produjo una columna eruptiva que alcanzó 4 km sobre el volcán, arrojando cenizas de roca y piroclásticos.





# Preguntas ??



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experiment and the Image Science & Analysis Group,



# Reviewing concepts is a good idea

## Mercury

Mercury is the closest planet to the Sun

## Venus

Venus has a beautiful name, but it's terribly hot

## Mars

Despite being red, Mars is a cold place

## Jupiter

It's the biggest planet in the Solar System

## Saturn

Saturn is the ringed planet and a gas giant

## Neptune

Neptune is the farthest planet from the Sun



# Our specialties

Venus is the second planet from the Sun

Specialty A

Mercury is the closest planet to the Sun

Despite being red, Mars is actually a cold place

Specialty B

Earth is the third planet from the Sun

Saturn is a gas giant and has several rings

Specialty C

Specialty D

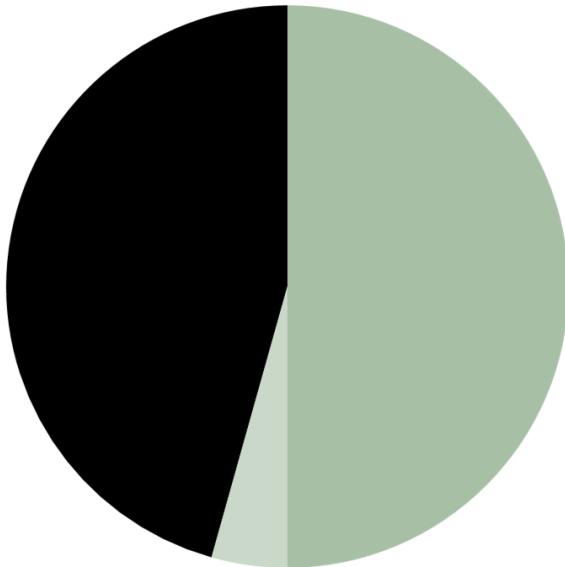
Jupiter is the biggest planet of them all

Specialty E

Specialty F



# Use a graph to show your data

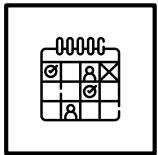


<b>45.7%</b>	<span style="color: black;">█</span>	Venus
<b>50%</b>	<span style="color: lightgreen;">█</span>	Mars
<b>4.3%</b>	<span style="color: mediumseagreen;">█</span>	Jupiter

To modify this graph, click on it, follow the link, change the data and paste the new graph here



# Our clients



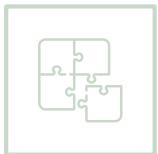
## Mercury

Mercury is a close planet to the Sun



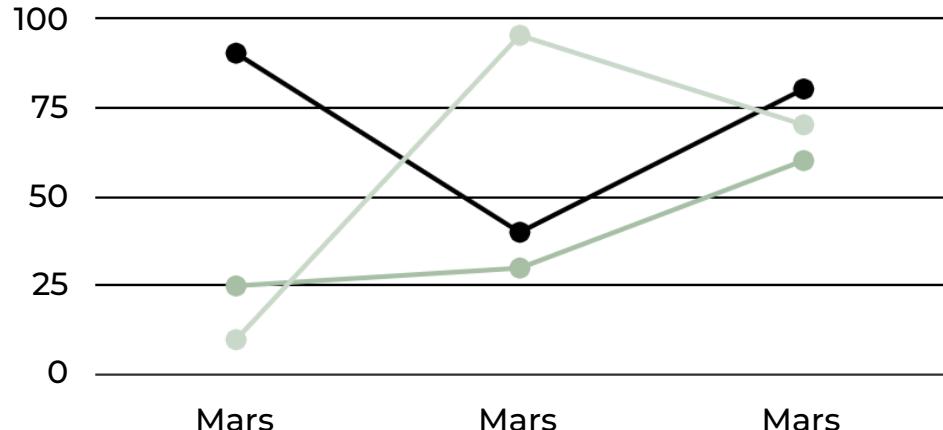
## Venus

Venus has really high temperatures



## Earth

Earth is the only planet that has life



Follow the link in the graph to modify its data and then paste the new one here.



# Infographics make your idea understandable...



Despite being red, Mars is a cold place



Mercury is the closest planet to the Sun



Jupiter is the biggest planet



Venus is terribly hot



# How our system works

**Pluto**  
Pluto is now seen as  
a dwarf planet



**Ceres**  
Ceres is in the main  
asteroid belt

**The Moon**  
The Moon is Earth's  
only natural satellite



# Business chart

## A successful business

Mercury is the smallest planet in the entire Solar System

### Idea A

Venus has a beautiful name



### Earth

Earth is where we all live on

### Idea B

Mars is actually a cold place



### Jupiter

Jupiter is the biggest planet

### Idea C

Saturn has several rings



### Neptune

Neptune is far away from us

### Idea D

Ceres is in an asteroid belt



### The Moon

The Moon is Earth's satellite



# This is a table

	Mass (earths)	Diameter (earths)	Gravity (earths)
Mercury	0.06	0.38	0.38
Mars	0.11	0.53	0.38
Saturn	95.2	9.4	1.16



# **Business meeting**

Mon	Tue	Wed	Thu	Fri
Introduction	Speech 2	Activity 3	Tech 3	Speech 5
Speech 1	Activity 2	Speech 3	Activity 4	Tech 4
Activity 1	Tech 1	Tech 2	Speech 4	Activity 5



# Conclusions

Conclusion 1:

Write a conclusion here

Conclusion 2:

Write a conclusion here

Conclusion 3:

Write a conclusion here

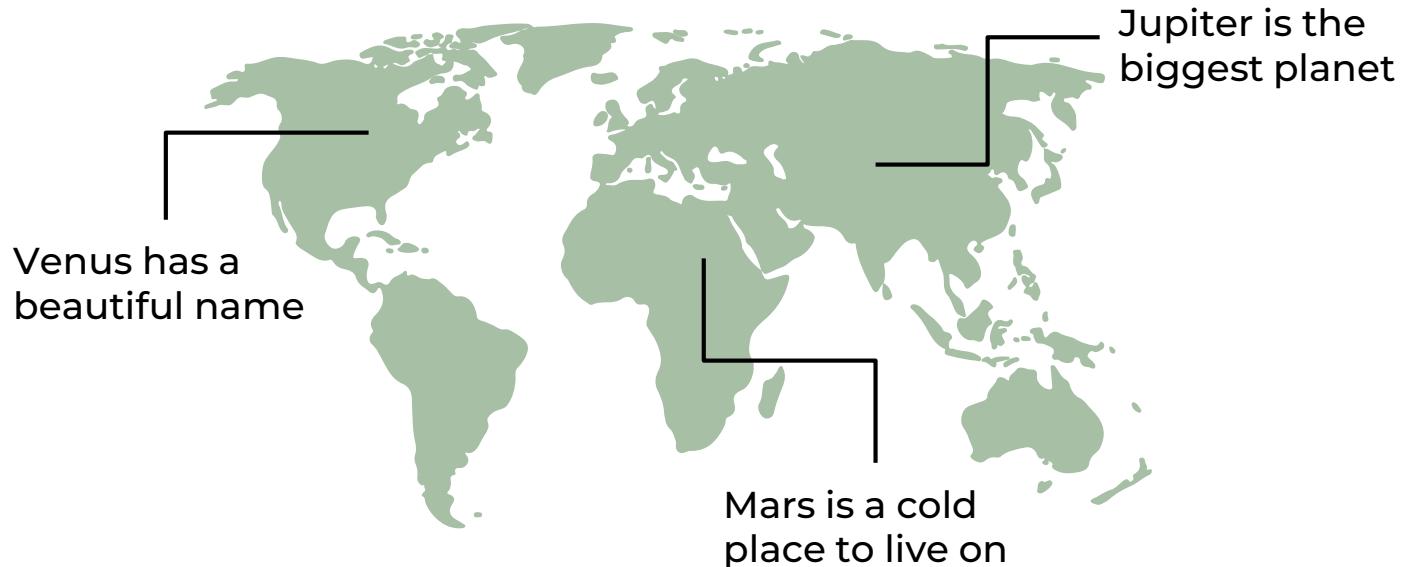


# 386,000 km

Distance between Earth and the Moon



# This is a map



# Our locations



## Headquarters

The Sun is the star at the center of the Solar System

## Admin office

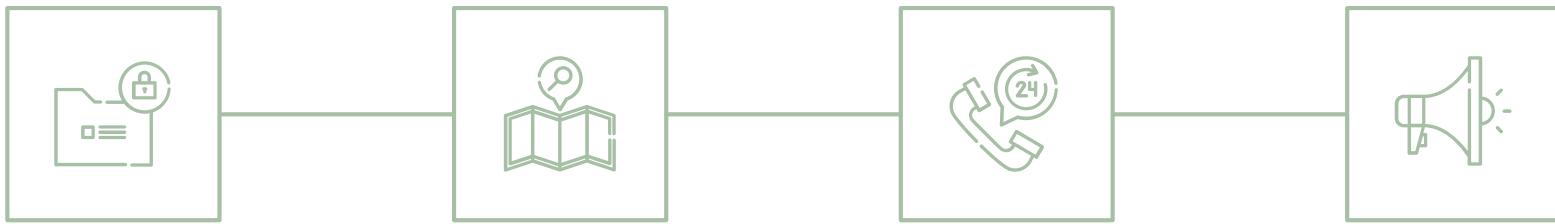
Ceres is located in the main asteroid belt

## Design office

The Moon is Earth's only natural satellite



# A timeline always works well



Day 1

We all live  
on Earth

Day 2

Jupiter is a  
big planet

Day 3

Mars is a  
cold place

Day 4

Venus is  
very hot



# Continue your timeline



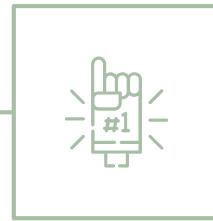
Day 5

We all live  
on Earth



Day 6

Jupiter is a  
big planet



Day 7

Mars is a  
cold place



Day 8

Venus is  
very hot



# Another slide with three columns

## Mercury

Mercury is the closest planet to the Sun and the smallest one in the Solar System

## Venus

Venus has a beautiful name and is the second planet from the Sun. It's terribly hot

## Mars

Despite being red, Mars is actually a very cold place. It's full of iron oxide dust



# 1961

Mercury is the smallest planet of them all

# 1969

Jupiter is the biggest planet of them all

# 1981

Saturn is a gas giant and has several rings



# 4,498,300,000

Big numbers catch your audience's attention





<200%

Big numbers catch your  
audience's attention



# 360,000 km

Distance between Earth and the Moon

# 333,000

The Sun's mass compared to Earth's

# 9h 55m 23 s

Jupiter's rotation period



# Important words

Because key words are great for catching your audience's attention



# Our team



Maria

You can speak a bit  
about this person here



Luis

You can speak a bit  
about this person here



Ana

You can speak a bit  
about this person here



# Our team

Ana Alvarado

You can speak a bit  
about this person here



Adam Williamson

You can speak a bit  
about this person here





## Desktop mockup

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# Tablet mockup

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## Phone mockup

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# Mockup devices



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# Thanks!

Do you have any questions?

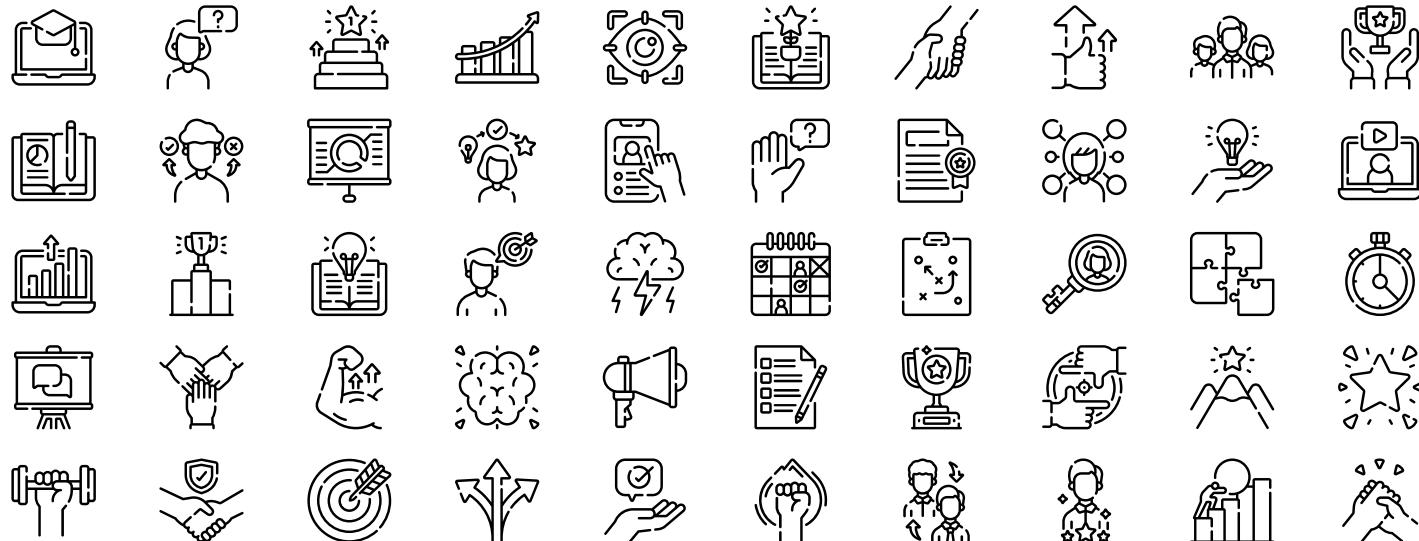
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# Icon pack



# Alternative resources

## PHOTOS

- Smart phone with white display screen on white table
- Business executives discussing with their colleagues
- Business people at the office
- Group of young professionals working together
- Portrait of young male enjoying work
- Woman working with laptop



# Alternative premium resources

Here's an assortment of alternative resources whose style fits the one of this template:

## PHOTOS

- Full shot colleagues working together
- Full shot smiley colleagues posing together
- High angle people working together
- High angle smiley colleagues working
- Business man banner concept with copy space
- Business woman banner concept with copy space I
- Business woman banner concept with copy space II
- Business colleagues banner concept with copy space I
- Business colleagues banner concept with copy space II
- Empowered business woman working in the city I
- Empowered business woman working in the city II
- Empowered business woman working in the city III
- Financial independent woman buying new house
- Three businesspeople looking at business report in the office
- Medium shot man working on laptop



# Resources

Did you like the resources on this template? Get them for free at our other websites.

## PHOTOS

- Man and woman coworking with papers
- Thoughtful man at laptop in office
- Cheerful coworkers with papers
- Cheerful people in office
- Thoughtful people doing paperwork
- Collaborating man and woman with papers
- Lovely woman working in office
- Happy successful female student posing with arms crossed
- Portrait of a smiling young man in eyewear
- Portrait of a smiling casual woman
- Minimalistic working desk with blank monitor screen
- White stationery and tablet on desk
- Top view smartphone template over workspace



# Premium resources

Did you like the resources on this template?  
Get them for free at our other websites.

## PHOTOS

- Smiley woman at work medium shot
- Businessman and a businesswoman
- Young man using laptop with coffee cup and digital tablet on kitchen counter
- Industrial designers working on 3d model
- Empowered business women working
- Medium shot empowered business woman
- Teamwork concept with business people
- Low angle womens team meeting

- Group of businesspeople looking at business plan in the office
- Close-up of a woman examining document
- Smiling young woman working at laptop in office
- Ethnic young employee working at laptop
- Front view women working together

## ICONS

- Mentoring and Training | Lineal



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## **Playfair Display**

(<https://fonts.google.com/specimen/Playfair+Display>)

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#c9d8c8

#000000

#ffffff

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Pana



Amico



Bro



Rafiki



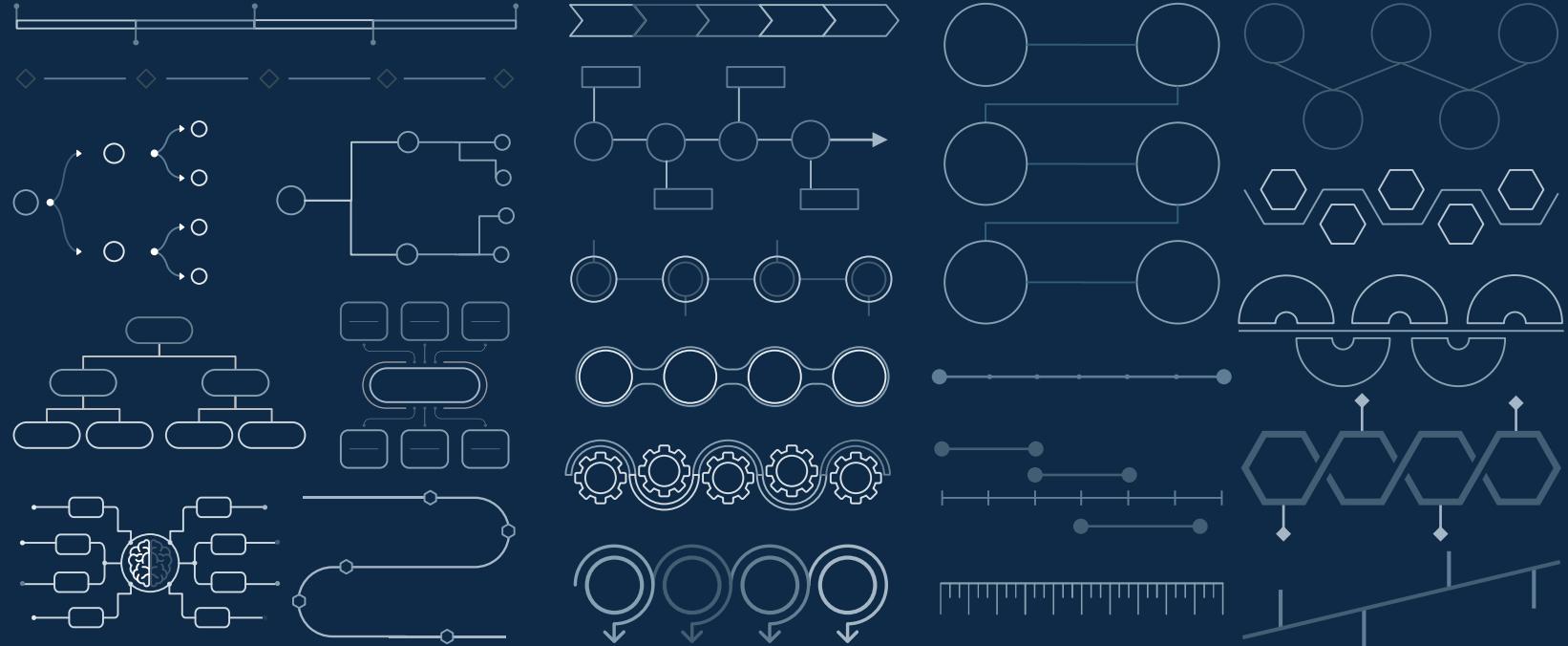
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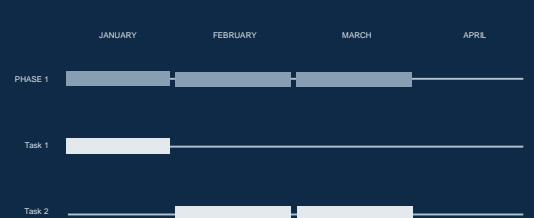
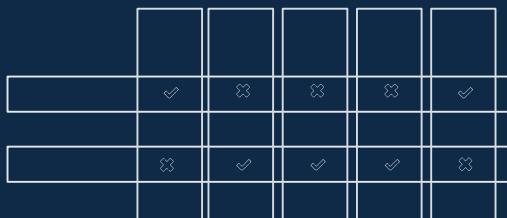
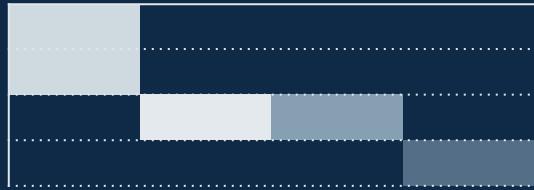
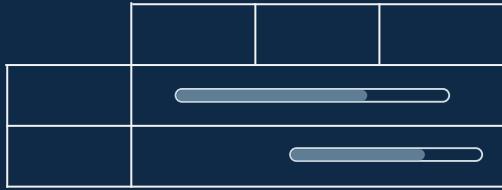
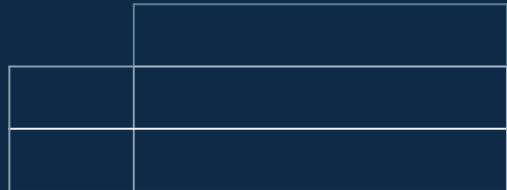
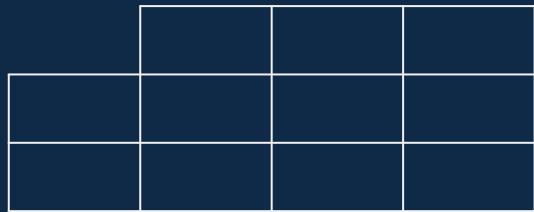
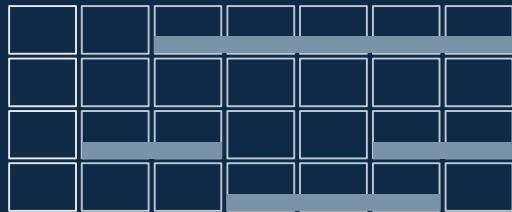
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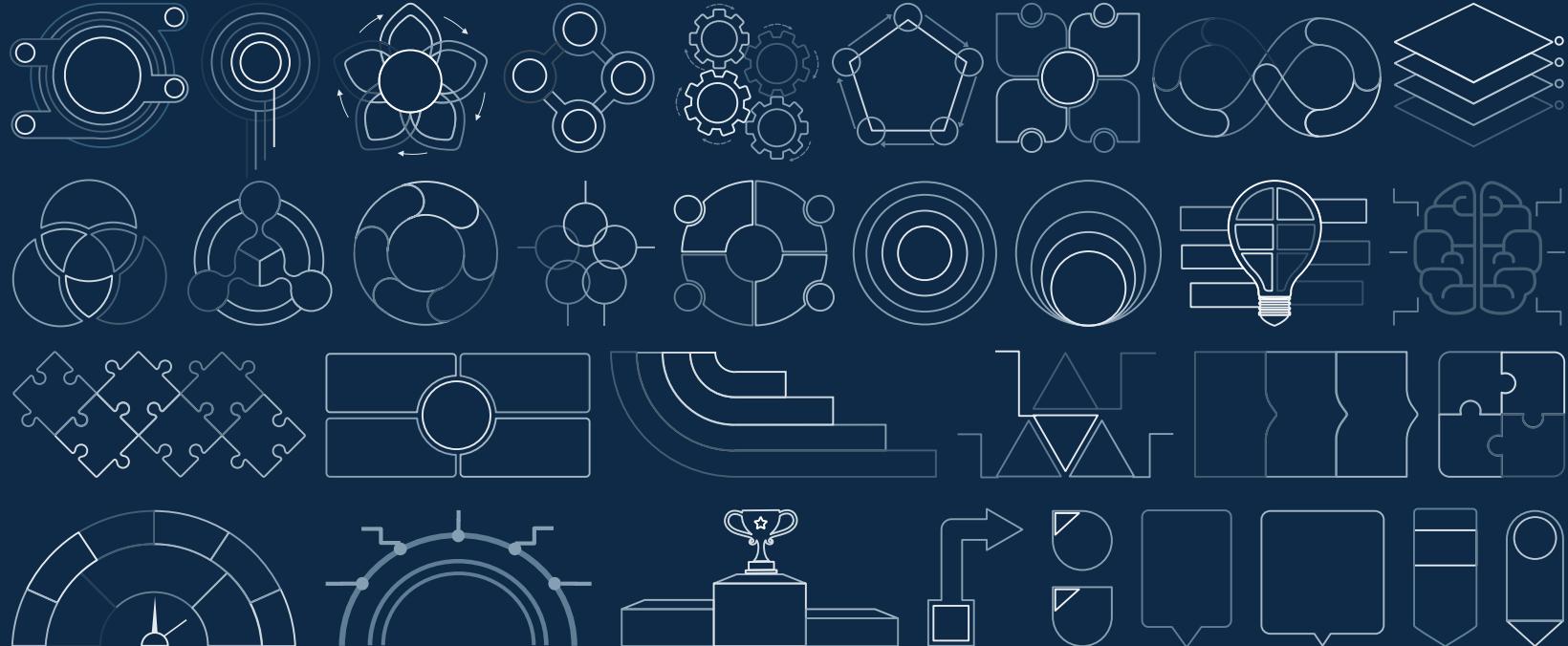
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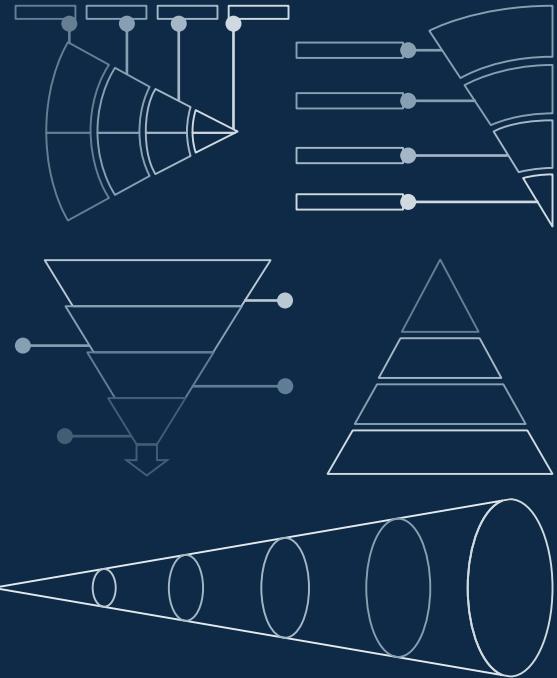
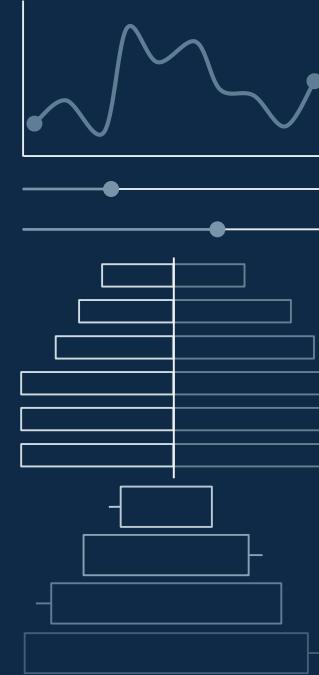
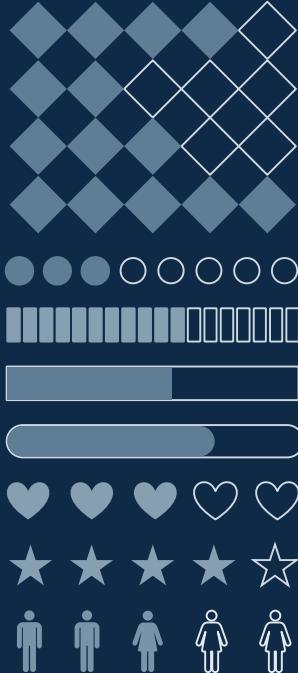
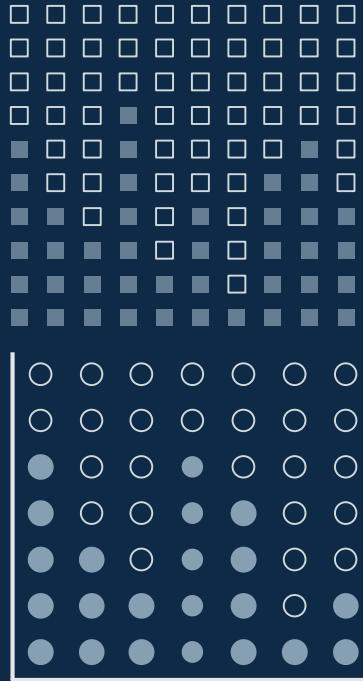












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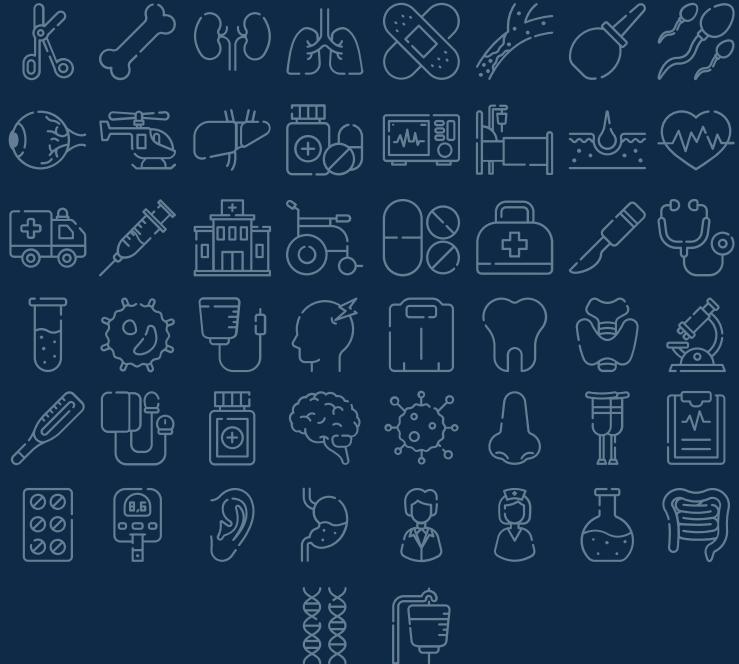
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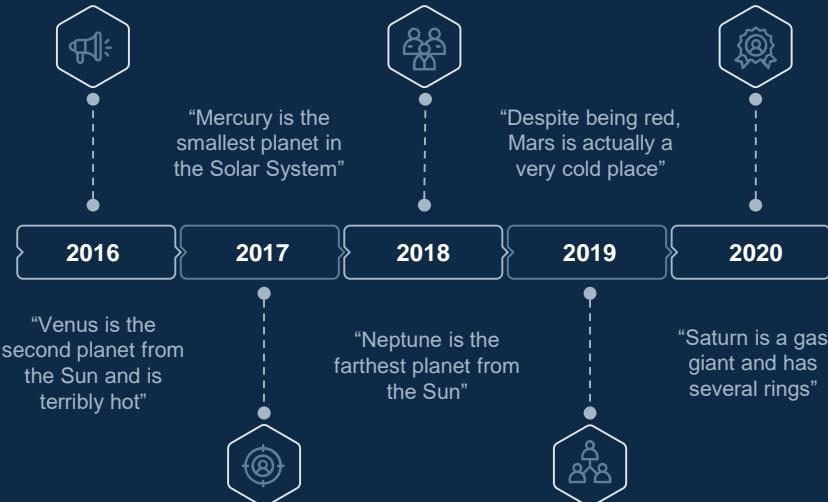
# Nature Icons



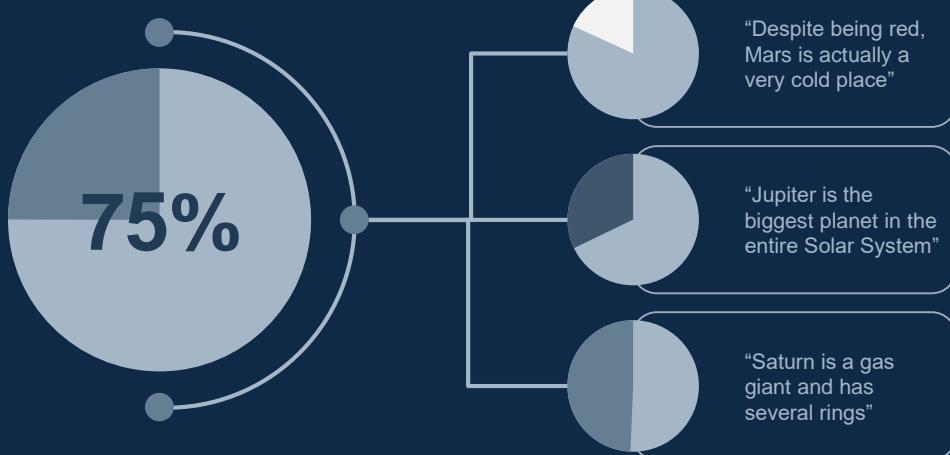
# SEO & Marketing Icons



# Premium infographics



# Premium infographics



# Premium Icons

## Digital Marketing



# Premium Icons

## Online Learning



# Premium Icons

## Laboratory



# Premium Icons

## Goals & Results



# Premium Icons

## Infographic Elements



