



## Year 3 Science Holiday Homework

### Autumn 1: Humans and Animals **Hand in date: September 2019**

Before we break up for a holiday, you will be given details of your next science topic and tasks of what you need to research. Find out as much as you can!

By doing the pre-topic research you will find it easier to access the work during the lessons.

House points will be awarded on your effort.

At the end of each half term you will be assessed on your ability to: **work scientifically**, **recall knowledge and understanding** and show how well you can **apply scientific ideas**.

**Your performance will be tracked carefully over the course of the year. Feedback will be given to parents/ care givers as well as your next teacher. Try your best to work hard. Enjoy the learning!**

1.

### Animals Including Humans

i	n	v	e	r	t	e	b	r	a	t	e
g	n	e	u	i	o	n	b	e	t	v	l
n	t	f	a	v	b	d	e	l	i	i	o
u	r	a	b	m	k	o	p	a	h	t	p
t	j	t	a	m	e	s	s	x	r	a	j
r	u	s	h	f	i	k	r	t	h	m	o
i	m	u	s	c	l	e	s	i	s	i	i
e	x	o	s	k	e	l	e	t	o	n	n
n	a	c	b	o	n	e	s	o	m	s	t
t	p	l	e	t	e	t	l	o	s	e	s
s	y	u	n	p	r	o	t	e	i	n	c
u	n	r	q	c	o	n	t	r	a	c	t

nutrients	endoskeleton
protein	exoskeleton
fats	invertebrate
vitamins	muscles
bones	contract
joints	relax

1. Find out how many bones there are in the human body.
2. Name as many different bones and then find out the jobs they do.
3. What do we call living things which have a skeleton inside their bodies?
4. Name at least 20 creatures that do have a backbone.
5. What do we call creatures that have a skeleton outside their bodies?
6. What do we call creatures that do not have a backbone?
7. Name at least fifteen creatures that do not have a backbone.
8. What do human beings need to stay alive and healthy?
9. Find out the names of the food groups.
10. List at least five foods which belong to each group.
11. Find out what would happen if we had too much or too little from each food group.
12. Find out the names of the different teeth in the human body.
13. What is the difference between children's teeth and adults' teeth?
14. Who was Marie Curie?
15. Can you make a mind map of all the interesting things which you found out?

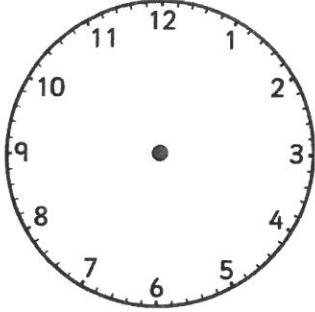
# الإخبار عن الوقت في نظام 24 ساعة

رسم الوقت قبل وبعد

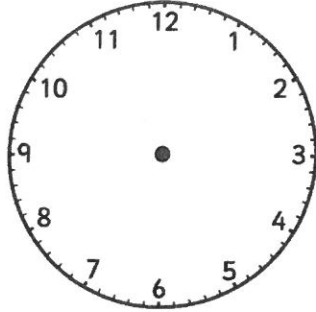
## Tell the Time in 24-Hour Format: Drawing the Time Before and After

ارسم الوقت على كل ساعة.

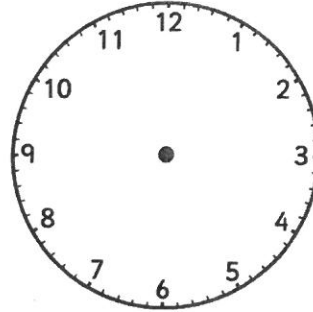
Draw the time on each clock.



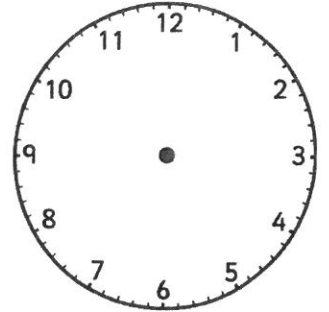
قبل ساعة  
1 hour before  
14:00



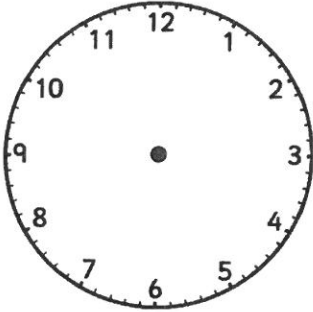
بعد ٤٥ دقيقة  
45 minutes after  
15:15



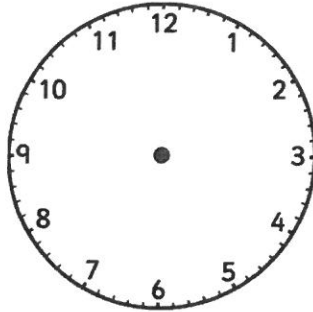
قبل ١٥ دقيقة  
15 minutes before  
20:10



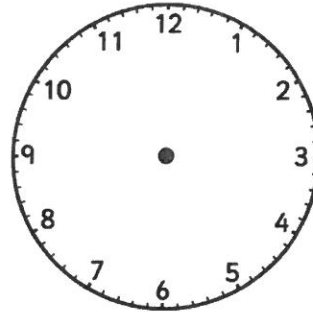
بعد ساعة وربع  
an hour and a quarter  
after 19:50



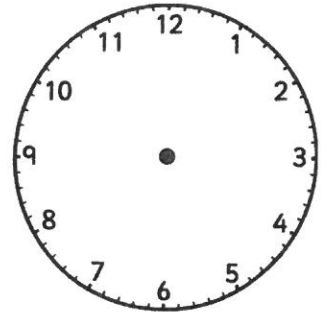
قبل ٢٥ دقيقة  
25 minutes before  
13:10



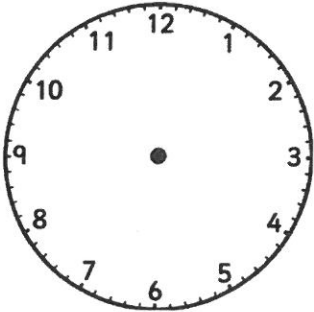
بعد ٥٠ دقيقة  
50 minutes after  
22:35



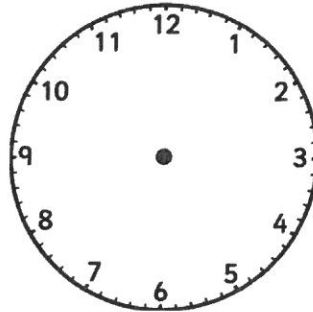
قبل ٣٥ دقيقة  
35 minutes before  
16:50



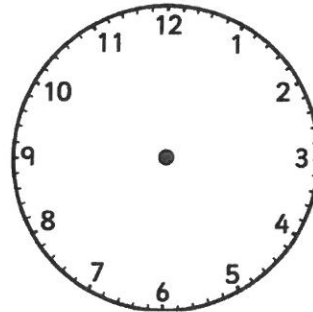
بعد ساعة وخمسين دقيقة  
an hour and 50  
minutes after 20:25



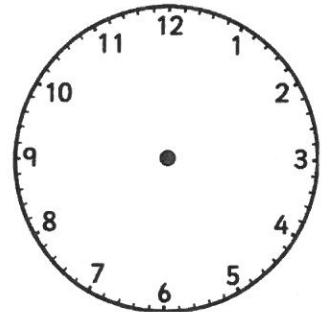
قبل ١٦ دقيقة  
16 minutes before  
12:56



بعد ٣٤ دقيقة  
34 minutes after  
19:52



قبل ٦٩ دقيقة  
69 minutes before  
16:23



بعد مائة ودقيقة  
101 minutes after  
18:54

# Using Different Types of Conjunction

L.O: To recognise and use different types of conjunctions.

Choose a **coordinating conjunction** from the box to complete these sentences.

and                      but                      or                      if                      so

1. I went to bed very late \_\_\_\_\_ I am tired today.
2. I listened to the weather forecast \_\_\_\_\_ put an umbrella in my bag.
3. I enjoy playing hockey \_\_\_\_\_ it's not my favourite sport.
4. We could go to the park \_\_\_\_\_ to the cinema.

Choose a **subordinating conjunction** from the box to complete these sentences.

although                      because                      so that                      even if                      whenever

1. My dad has fixed my bike \_\_\_\_\_ I can take it to the park.
2. My brother is grumpy \_\_\_\_\_ he has got to do his homework.
3. I will always support my local team, \_\_\_\_\_ they always lose!
4. He goes abroad on holiday, \_\_\_\_\_ he doesn't like flying.

Choose a pair of **correlative conjunctions** from the box to complete these sentences.

whether/or                      either/or                      both/and                      not only/but

1. I'm not sure \_\_\_\_\_ I'm going to the match \_\_\_\_\_ not.
2. My mum is \_\_\_\_\_ a brilliant doctor, \_\_\_\_\_ she is a great runner too.
3. The weather is forecast to be \_\_\_\_\_ hot \_\_\_\_\_ humid.
4. We are having \_\_\_\_\_ pasta \_\_\_\_\_ curry for dinner.

# Using Different Types of Conjunction

L.O: To recognise and use different types of conjunctions.

Choose the correct type of conjunction from the box to complete these sentences.

## Coordinating Conjunctions

and but or if so

## Subordinating Conjunctions

although because so that even if whenever before even though until

## Correlative Conjunctions

whether/or either/or both/and not only/but

## Questions

1. I went to bed very late \_\_\_\_\_ I am tired today.
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## Correlative Conjunctions

whether/or either/or both/and not only/but

Use a **coordinating conjunction** to rewrite these pairs of sentences as one sentence.

1. We enjoy watching films. We enjoy going bowling.
2. He wants to win the race. He is running more slowly than the others.
3. My mum loves cake. I am going to bake a cake for her birthday.

Use a **subordinating conjunction** to rewrite these pairs of sentences.

4. My hands are freezing cold. I forgot to bring my gloves today.
5. My mum takes me to the match every week. She doesn't like football.
6. I take the dog for a walk every day. Sometimes it is raining.

Use a pair of **correlative conjunctions** to rewrite these pairs of sentences.

7. I like carrots. I like asparagus.
8. I don't know if it's going to be sunny. I don't know if it's going to be raining.
9. She is the regional champion. She is also the national champion.

# Using Different Types of Conjunction

Name the type of conjunctions used in each of these sentences. Write your answers in the boxes.

1. She said she was going to come, although I don't think she was that keen.

2. He was chosen to represent the school because he was the most talented swimmer.

3. We are going to go to either Spain or Portugal next year.

4. She had walked all the way to school before realising that she was wearing odd socks.

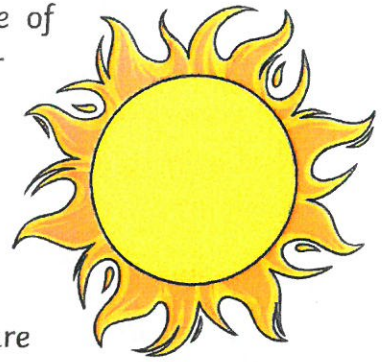
5. He always seemed so confident, yet he was actually quite shy.

6. Our neighbours are not quiet, nor are they particularly friendly.

# Sun Safety Reading Comprehension

We all need some sun exposure - it's the top source of Vitamin D, which helps our bodies absorb calcium for stronger, healthier bones.

However, repeated, unprotected exposure to the sun's ultraviolet (UV) rays can cause skin damage, eye damage and skin cancer.



Most children get much of their lifetime sun exposure before age 18, so it's important for parents to teach them how to enjoy fun in the sun safely.

Taking the right precautions is very important when protecting your skin.

## Sun Exposure

The sun radiates light to the earth, and part of that light consists of invisible UV rays. When these rays reach the skin, they cause tanning, burning, and other skin damage. Sunlight contains three types of ultraviolet rays: **UVA**, **UVB** and **UVC**:

- **UVA** rays cause skin aging and contribute to skin cancer. Because UVA rays pass effortlessly through the ozone layer (the protective layer of the atmosphere, or shield, surrounding the earth), they make up the majority of our sun exposure.
- **UVB** rays are also dangerous, causing sunburns and eye damage (cataracts). They also contribute to skin cancer. Melanoma, the most dangerous form of skin cancer, is associated with severe UVB sunburns that occur before the age of 20. Most UVB rays are absorbed by the ozone layer, but enough of these rays pass through to cause serious damage.
- **UVC** rays are the most dangerous, but fortunately, these are blocked by the ozone layer and don't reach the earth.





### Melanin: The Body's First Line of Defense

UV rays react with a chemical called melanin that's found in skin. Melanin absorbs dangerous UV rays before they cause skin damage. The lighter someone's natural skin colour, the less melanin it has and the darker a person's natural skin colour, the more melanin it has to protect itself.

As the melanin increases in response to sun exposure, the skin tans. Those who are regularly exposed to the sun are at a much greater risk. Sunburn develops when the amount of UV exposure is greater than what can be protected against by the skin's melanin.

### Avoid the Strongest Rays of the Day

Seek shade when the sun is at its strongest (usually from 10am to 4pm). If you are in the sun during this time, be sure to apply and reapply sunscreen. Most sun damage occurs as a result of incidental exposure during day-to-day activities, not sunbathing! Even on cloudy, cool or overcast days, UV rays travel through the clouds. Clouds don't filter out UV rays and this 'invisible sun' can cause unexpected sunburn and skin damage. People are often unaware that they're developing sunburn on cooler or windy days because the temperature or breeze keeps skin feeling cool.

Cover Up	Use Sunscreen	Use Protective Eyewear
One of the best ways to protect yourself from the sun is to cover up and shield skin from UV rays. Be sure that clothes will screen out harmful UV rays by placing your hand inside the garments and making sure you can't see it through them. Babies under 6 months should be kept out of the sun.	Select an SPF of 30 or higher to prevent sunburn and tanning, both of which are signs of skin damage. Choose a sunscreen that protects against UVA and UVB rays. For sunscreen to do its job, it must be applied correctly. So be sure to: <ul style="list-style-type: none"> <li>• Apply sunscreen whenever you are in the sun and reapply often (every 2 hours).</li> <li>• Apply a water-resistant sunscreen around water or when swimming.</li> </ul>	Sun exposure damages the eyes as well as the skin. The best way to protect eyes is to wear sunglasses. Not all sunglasses provide the same level of ultraviolet protection; Purchase sunglasses with labels ensuring that they provide 100% UV protection.

# Sun Safety Questions

1. How does Vitamin D help our bodies?  
\_\_\_\_\_
2. What are the three types of ultraviolet rays which radiate from the sun? Which is the least dangerous and which is the most dangerous?  
\_\_\_\_\_
3. How does the ozone layer work to protect us from the sun's rays?  
\_\_\_\_\_
4. How does melanin protect the skin?  
\_\_\_\_\_
5. Why does sunburn happen?  
\_\_\_\_\_
6. When is the sun at its strongest?  
\_\_\_\_\_
7. True or false: Clouds filter out UV rays.  
\_\_\_\_\_
8. What is meant by 'invisible sun'?  
\_\_\_\_\_
9. What precautions should parents of babies take?  
\_\_\_\_\_
10. Why is it important to reduce 'tanning'?  
\_\_\_\_\_
11. True or false: Sunscreen should protect against UVC rays.  
\_\_\_\_\_
12. What should you look for when purchasing sunglasses?  
\_\_\_\_\_