

- 100.1 Complete each sentence.
- 1 We didn't ...
 - 2 Our team ...
 - 3 I had little ...
 - 4 We had to ...
 - 5 Nobody ...
 - 6 Mike kept ...
 - 7 I don't ...

- 100.2 Put in the correct form of the word.
- 1 Two p...
 - 2 The d...
 - 3 I thin...
 - 4 Rose ...
 - 5 Ther...
 - 6 Eve...
 - 7 Lin...
 - 8 Liz...
 - 9 Jo...
 - 10 D...

- 100.3 Complete the sentences.
- 1 ...
 - 2 ...

Adjectives and adverbs 1 (quick/quickly)

Look at these examples:

- Our holiday was too short – the time passed very **quickly**.
- Two people were **seriously** injured in the accident.

Quickly and **seriously** are *adverbs*. Many adverbs are formed from an adjective + **-ly**:

<i>adjective:</i>	quick	serious	careful	quiet	heavy	bad
<i>adverb:</i>	quickly	seriously	carefully	quietly	heavily	badly

For spelling, see Appendix 6.

Not all words ending in **-ly** are adverbs. Some *adjectives* end in **-ly** too, for example:

- friendly lively elderly lonely silly lovely

Adjective or adverb?

Adjectives (**quick/careful** etc.) tell us about a *noun* (somebody or something). We use adjectives before nouns:

- Sam is a **careful driver**.
(*not a carefully driver*)
- We didn't go out because of the **heavy rain**.

Adverbs (**quickly/carefully** etc.) tell us about a *verb* (*how* somebody does something or *how* something happens):

- Sam **drove carefully** along the narrow road. (*not drove careful*)
- We didn't go out because it was **raining heavily**. (*not raining heavy*)

Compare:

She speaks **perfect English**.
adjective + noun

She speaks English **perfectly**.
verb + noun + adverb

We also use adjectives after some verbs, especially **be**, and also **look/feel/sound** etc.

Compare:

- Please **be quiet**.
- I was **disappointed** that my exam results were so bad.
- Why do you always **look so serious**?
- I **feel happy**.

- Please **speak quietly**.
- I was **unhappy** that I did so **badly** in the exam. (*not did so bad*)
- Why do you never **take me seriously**?
- The children were **playing happily**.

We also use adverbs before *adjectives* and *other adverbs*. For example:

reasonably cheap	(<i>adverb + adjective</i>)
terribly sorry	(<i>adverb + adjective</i>)
incredibly quickly	(<i>adverb + adverb</i>)

- It's a **reasonably cheap** restaurant and the food is **extremely good**.
- I'm **terribly sorry**. I didn't mean to push you. (*not terrible sorry*)
- Maria learns languages **incredibly quickly**.
- The examination was **surprisingly easy**.

You can also use an adverb before a *past participle* (**injured/organised/written** etc.):

- Two people were **seriously injured** in the accident. (*not serious injured*)
- The meeting was **very badly organised**.

Tense	Question Element	Examples
Modals	Can	Can I play ?
	Should	Should I play

b-Wh questions

A **Wh question** is an open question, meaning that it can have any number of answers. It asks about some missing information the speaker needs. This corresponds to the different sentence elements, such as the verb, objects, manner, place, time, purpose, etc.

The Wh Question Rule: To form a Wh question in English, add a Wh question word before the corresponding yes/no question.

Present Simple	Place	Where does she play?
Past Simple	Time	When did they play?
Present Progressive	Manner	How is he playing?
Past Progressive	Direct object	What was he playing?
Present Perfect	Indirect object	With whom have you played?
Past Perfect	Reason	Why had they played?
Past Perfect Progressive	Frequency	How often had she been playing?
Future Simple	Number	How much will I play?
Modals	Possession	Whose role can he play?

Questions with How

How are you?

How do you make questions in English? Form

How long have you lived here? Period

How often do you go to the cinema? Frequency

How much is this dress? Number

How old are you? Age

How many people came to the meeting? Quantity

Wh Questions

WH questions are used to ask for information, they are different than Yes/ No questions.
There are 06 different WH questions

What	Thing	What is that?
When	Time	When is the game?
Who	Person	Who do you live with ?
Where	Place	Where do you live?
Why	Reason	Why are you happy?
How	Direction /feeling	How are you ?

WH questions in present tense, we use **Do** or **Be**.

1. WH + do/does+ subject +verb

EX: Where do you work ?

When does she wake up?

Who is your brother?

2. WH+ Be + Subject

EX: Where are you from?

Who is that man?

When is your class?

* Where are you from?

* I am from Japan.

* What is your name?

* My name is Jacob.

* When do you wake up?

* I wake up at 7:30 am.

* Why are you angry?

* I am angry because I did not pass my exam.

The rules for forming negative and interrogative sentences using auxiliary verbs in English

Forming negative sentences and forming questions in English may seem complicated at first. The relatively many English verb tenses use different auxiliary verbs that take part in the changes needed when expressing negation and interrogation. Despite having seemingly different grammar rules for each verb tense, there are actually a few simple grammar rules which are applied systematically across all tenses and verb forms

- 1. Auxiliary Verbs
- 2. Negative sentences
- 3. Questions a- Yes / No questions b-Wh questions

1. Auxiliary Verbs

The verb forms used as auxiliary verbs in English are:

- 1. to be
- 2. to do
- 3. to have
- 4. The modal verbs

2. Negative Sentences

A **negative sentence** (or statement) states that something is not true or incorrect. This “negation” element is created according to the following general rule.

The Negation Rule: In English, in order to claim that something is not true, you form a negative sentence by adding the word *not* after the first auxiliary verb in the positive sentence. If there is no auxiliary verb in the positive sentence, as in the Present Simple and Past Simple tenses, then you add one (in both these cases, the auxiliary verb *do*).

Tense	Negative Element + contracted forms	Example
Present Simple	do+not = don't does+not = doesn't	I do not play. She doesn't play.
Past Simple	did+not = didn't	I didn't play.
Present Progressive	am + not (isn't) is+not = isn't are+not = aren't	I am not playing. He is not playing. We aren't playing.
Past Progressive	was+not = wasn't were+not = weren't	I wasn't playing. They were not playing.
Present Perfect	have+not = haven't has+not = hasn't	You haven't played. She has not played.
Past Perfect	had+not = hadn't	You hadn't played.

6

C) Fractions:

$1/8$	One eighth	$1/3$	One third
$1/5$	One fifth	$2/3$	Two thirds
$1/4$	One quarter	$1/2$	One half
$3/4$	Three quarters		

D) Sums

+	Plus	=	Equals
-	Minus	,	Point
x	Multiply by	%	Percent
/	Divided by		

Grammar Practice

Name: _____

Articles - The articles are **a, an, the**. Articles are marked with a checkmark on top, and they indicate a noun is coming. They are special adjectives, but are marked with a checkmark. Note that every noun will NOT have an article in front of it, though many do.

Nouns - Name a person, place, thing or idea and can be common or proper. Proper nouns are always capitalized and name specific things. A common noun is lady, but a proper noun is Mrs. Johnson. A common noun is store, but a proper noun is Dick's Sporting Goods. Nouns are marked with a single underline.

Example: The tall [✓]man on television was dressed in a nice [✓]suit.

Example: My family attends church at Olive Baptist Church every Sunday.

* Practice. Checkmark the articles and underline the nouns.

After the violent storm, many of the houses in the city were damaged.

The entire class started watching the last game of the season.

We met Aunt Jan for dinner at the new restaurant on Thursday.

Pronouns - Take the place of a noun. "Jessica went to the store so SHE could buy some ice cream." The pronoun "she" took the place of saying Jessica's name again. Some pronouns can be used as the subject of a sentence, but others are used as object pronouns or possessive pronouns. They are marked by writing *pron.* on top of the word.

Subject pronouns - I, you, he, she, it, we, they

Object pronouns - me, him, her, us, them, it, you

Possessive pronouns -our, ours, mine, my, his, her, hers, their, theirs, your, yours, its

Examples: They ^{pron}traveled to California for their summer ^{pron}vacation. ("They" is a subject pronoun since "they" is the subject of the sentence; "their" is a possessive pronoun showing ownership of the vacation.)

pron *pron* ✓

She gave him the biggest slice of apple pie. ("She" is a subject pronoun; "him" is an object pronoun since it's not the subject, and it receives the action. [She gave it to whom? She gave it to him.]])

* Practice: Checkmark the articles. Underline the nouns once. Underline the verbs twice. Write *pron.* over the pronouns.

We ate a delicious meal after the ballgame on Saturday.

During the hurricane, their house was severely damaged by the wind.

He made her a special bracelet from seashells.

Their house was painted a light gray color.

Verbs - Every sentence must have a verb! Verbs can show action, or they can be a linking verb. Action verbs show some kind of action - skipped, hop, throw, baked, watched, took, etc. Verbs can be happening now (present tense), already happened (past tense), or they will happen (future tense). Depending on the verb tense, a helping verb may be needed. If you have a sentence {I am planning a party for my sister.} "am" is a helping verb used with the main action verb "planning." Your complete verb is "am planning." The helping verbs are listed below.

Helping verbs - am, is, are, was, were, be, being, been, have, has, had, do, does, did, may, might, must, can, could, shall, will, should, would

The other type of verb is a linking verb. Note that some of the linking verbs are also helping verbs. Linking verbs do not show action, but are used to link the subject with a descriptive word coming after the verb.

Linking verbs - am, is, are, was, were, be, being, been (all of these can be helping verbs also) Other linking verbs are - feel, smell, taste, sound, look, seems, becomes. Linking verbs can sometimes be harder to find in a sentence. Double underline verbs.

Examples: The tall man on television was shopping for a nice suit. {"was" is used as a helping verb.}

pron
She mixed and rolled the dough for the sugar cookies. {"mixed" and "rolled" are action verbs}

My father is a teacher at the college on Spring Street. {"is" is a linking verb. The linking verb "is" links the noun teacher to the subject father.}

* Practice: Checkmark the articles. Underline the nouns once. Write *pron.* over the pronouns. Underline the verbs twice.

The strong man cut the tree into smaller pieces.

The steaks for dinner were delicious.

Many young boys practiced basketball for the game on Saturday.

Several people tried the blackberry jam on their toast.

They are shopping for a new house in our neighborhood.

David is very sick from the flu.

Adjectives - Describes a noun or pronoun only. Many times you can do an "adjective test" to see if your word is an adjective. The "adjective test" is to say the word between an article and a noun. See the examples below.

the pink house - since this makes sense, "pink" is an adjective and describes the noun house

the quickly store - since this does NOT make sense, "quickly" is NOT an adjective

Adjectives answer the questions which one? what kind? how many? how much? whose?
Adjectives are marked by writing *adj.* on top of the word.

Examples: The ^{✓ adj} tall man on television was shopping for a ^{✓ adj} nice suit. ("tall" describes the man and it comes between an article and noun, passing the adjective test; "nice" describes the suit, and it also passes the adjective test)

The ^{✓ adj} small ^{✓ adj} black cat played with a ^{✓ adj} tiny ^{✓ adj} red string. ("small" and "black" describe the noun cat; "tiny" and "red" describe string)

* Practice: Checkmark the articles. Underline the nouns once. Underline the verbs twice. Write *pron.* over the pronouns. Write *adj.* over the adjectives.

My sweet grandmother taught us many useful lessons.

One television channel showed a long commercial about a new shampoo.

She used the blue paint for her bedroom walls and shelves.

The green shrubs and trees needed rain.

Adverbs - An adverb can modify/ describe a verb, adjective, or another adverb.
Adverbs tell when? where? how? how often? and to what extent?

Many adverbs deal with time (today, soon, sometimes). Many adverbs end in LY. "Not", "never", and "always" are always adverbs. Often adverbs can move around in sentences and still make sense. For example:

We quickly ran in the hardware store and bought blue paint for our house.

OR

We ran into the hardware store and quickly bought blue paint for our house.

Quickly is an adverb that tells how they ran, and you can move it around in the sentence.
Adverbs are marked with *adv.*

Example sentences:

pron *adv* ✓ *adj*
She quietly put the puzzle pieces in place. ("quietly" tells how she put)

✓ *adj* *adv* *adj*
The delicious soup was very hot. ("very" tells how hot OR to what extent hot)

✓ *pron* *adv* *adj* ✓
During the hurricane, their house was severely damaged by the wind. ("severely" tells how damaged)

* Practice: Checkmark the articles. Underline the nouns once. Underline the verbs twice. Write *pron.* over the pronouns. Write *adj.* over the adjectives. Write *adv.* over the adverbs.

One sunny day several students thoughtfully bought my dinner.

The angry pig ran wildly around the muddy pit.

Aren't we planning a vacation for the month of May?

We sometimes fill the jar with cookies or brownies.

It's a very thrilling time of year for a ballgame.

I've never taken a written driving course on the computer.

Prepositions - These are words that add additional information to sentences. They always start a prepositional phrase. A prepositional phrase is not necessary to the sentence, but it adds additional information. The phrase always ends with a noun or

pronoun called the object of the preposition (OP). Prepositions are marked by writing *prep.* over the word.

A list of the major prepositions is below.

aboard, about, above, across, after, against, along, among, around, at
before, behind, below, beneath, beside, between, beyond, but, by
down, during, except, for, from, in, inside, into, like, near, of, off, on, out, outside, over
past, since, through, throughout, to, toward, under, underneath, until, up, upon
with, within, without

Examples:

(With a [✓] *adj* grateful heart), we ^{pron} opened the new school [✓] *adj* [✓] *adj* supplies.

Grandmother lives ^{prep} (around the corner) ^{prep} (from the library.)

[✓] The man ^{prep} (from China) visited ^{prep} ^{adj} (for several weeks.)

* Practice: Checkmark the articles. Underline the nouns once. Underline the verbs twice. Write *pron.* over the pronouns. Write *adj.* over the adjectives. Write *adv.* over the adverbs. Write *prep.* over the prepositions, and put parentheses around the prepositional phrases.

The obedient student walked quietly down the hallway.

Dad was too tired and couldn't play with me.

We had mashed potatoes with gravy and hot rolls with butter.

Along the path we picked up a dozen small pebbles.

Coordinating Conjunctions - They join two grammatical units in a sentence. The c.c. could be joining two prepositional phrases, two verbs, two subject nouns, etc. They are marked by writing a c.c. above the word. The coordination conjunctions are: and, but, or, nor, for, yet, and semicolon (;).

A c.c. can join two prepositional phrases. The boy ran (over the hill) and (through the woods.)

A c.c. can join two subject nouns. Peter and James were disciples (of Jesus.)

A c.c. can also join two smaller sentences to form a compound sentence.

The lady loved her cat, but she also liked dogs.

* Practice: Checkmark the articles. Underline the nouns once. Underline the verbs twice. Write *pron.* over the pronouns. Write *adj.* over the adjectives. Write *adv.* over the adverbs. Write *prep.* over the prepositions, and put parentheses around the prepositional phrases. Put a *c.c.* over any coordinating conjunctions.

We had mashed potatoes with gravy and hot rolls with butter.

The green shrubs and trees needed rain.

The first day of school was great; I will return tomorrow.

Interjections - The interjection shows emotion or feeling and is marked with an exclamation point above the word.

Example: Ouch! You hurt my foot. Well, I'm not sure.

Practice the sentences on the following page using all the marks you have learned.

The torn books were taken to the repair shop.

Many students are involved in clubs after school, and they must practice.

Yes! I enjoyed our short vacation to the mountains.

After the test, I worked on my science project.

For many years, the Navaho Indians lived in Arizona and New Mexico.

The corn casserole was too hot and burned my tongue.

Hard work often leads to a successful future.

The beach is a great place for a picnic.

Computers are useful, but they can also be frustrating.

The young soldier practiced for three weeks at Fort Hood.

Amelia traveled to Switzerland for her vacation.

Alexander and Andrew trained for the marathon and ran on Thursday.

Soap and toothpaste are two necessary things for everyone.

The Description of Jobs

Activity one: Fill in the gaps:

1- I am a **mechanic** but I want to become a **mechanical** engineer.

(mechanics/mechanic/ mechanical)

2- **The engineer** is responsible for every **engine** in the factory.

(engineering/ engineer/ engine)

3- The **electrician** repairs all the **electrical** equipment on the rig.

(electrical/ electrician/ electricity)

Activity two: Complete using the words below:

Lab technician, inspector, electronic engineer, joiner, electrician, mechanic, fitter

1- Joiner is someone who works with wood.

2- Lab technician is someone who works in laboratory.

3- Fitter is someone who puts together, adjusts, or installs machinery or equipments.

4- Inspector is someone who checks the quality of work or goods.

5- Mechanic is someone who repairs and maintain engines especially car engines.

6- Electronic engineer is someone who works with thing like computer, TVs, radios, etc....

7- Electrician is someone who works with electrical equipment

GRAMMAR WORKSHEET

On the line next to the sentence number, tell whether the underlined adverb modifies a verb, an adjective, or another adverb by writing the correct answer's corresponding letter. Then fill in the spaces within the three sentences after sentence 15. If your answers are correct, you will understand this activity's title.

1. _____ Patricia slept peacefully. (b) verb (c) adjective (d) adverb
2. _____ Our teachers are very happy with the results. (t) verb (s) adjective (l) adverb
3. _____ Larry's unusually good cooking skills came in handy last weekend. (b) verb (h) adjective (o) adverb
4. _____ He ran swiftly away from the tackler. (e) verb (a) adjective (i) adverb
5. _____ She danced so gracefully in the competition. (d) verb (m) adjective (p) adverb
6. _____ They sang beautifully during the entire winter concert. (l) verb (n) adjective (p) adverb
7. _____ My aunt was extremely hungry after we completed the three-hour hike. (r) verb (o) adjective (d) adverb
8. _____ We had met somewhat earlier than you think. (v) verb (n) adjective (a) adverb
9. _____ Are they going away? (t) verb (e) adjective (r) adverb
10. _____ His rather clever remarks were not appreciated. (g) verb (e) adjective (u) adverb
11. _____ These stories seem strangely familiar to me. (x) verb (s) adjective (o) adverb
12. _____ They will hardly try to win. (n) verb (r) adjective (s) adverb
13. _____ Francine earns high grades quite often. (t) verb (e) adjective (t) adverb
14. _____ Do not walk alone in the forest. (s) verb (u) adjective (f) adverb
15. _____ We met only recently. (g) verb (h) adjective (s) adverb

The five sentences that illustrate an adverb modifying a verb are numbers _____, _____, _____, _____, and _____. Their corresponding letters spell the word _____.

The five sentences that illustrate an adverb modifying an adjective are numbers _____, _____, _____, _____, and _____. Their corresponding letters spell the word _____.

The five sentences that illustrate an adverb modifying another adverb are numbers _____, _____, _____, _____, and _____. Their corresponding letters spell the word _____.

Energy

EXERCISES

100.1 Complete each sentence with an adverb. The first letters of the adverb are given:

- 1 We didn't go out because it was raining heavily.....
- 2 Our team lost the game because we played very badly.....
- 3 I had little difficulty finding a place to live. I found a flat quite easily.....
- 4 We had to wait for a long time, but we didn't complain. We waited patiently.....
- 5 Nobody knew Steve was coming to see us. He arrived unexpectedly.....
- 6 Mike keeps fit by playing tennis regularly.....
- 7 I don't speak French very well, but I can understand perfectly..... if people speak slowly..... and clearly.....

100.2 Put in the correct word.

- 1 Two people were seriously injured in the accident. (serious / seriously)
- 2 The driver of the car had serious injuries. (serious / seriously)
- 3 I think you behaved very selfishly. (selfish / selfishly)
- 4 Rose is terribly upset about losing her job. (terrible / terribly)
- 5 There was a sudden change in the weather. (sudden / suddenly)
- 6 Everybody at the party was colourfully dressed. (colourful / colourfully)
- 7 Linda likes wearing colourful clothes. (colourful / colourfully)
- 8 Liz fell and hurt herself quite badly. (bad / badly)
- 9 Joe says he didn't do well at school because he was badly taught. (bad / badly)
- 10 Don't go up that ladder. It doesn't look safe. (safe / safely)

100.3 Complete each sentence using a word from the box. Sometimes you need the adjective (careful etc.) and sometimes the adverb (carefully etc.).

careful(ly)	complete(ly)	continuous(ly)	financial(ly)	fluent(ly)
happy/happily	nervous(ly)	perfect(ly)	quick(ly)	special(ly)

- 1 Our holiday was too short: The time passed very quickly.....
- 2 Steve doesn't take risks when he's driving. He's always carefully.....
- 3 Sue works continuously..... She never seems to stop.
- 4 Rachel and Patrick are very happily married.
- 5 Maria's English is very fluently..... although she makes quite a lot of mistakes.
- 6 I cooked this meal specially for you, so I hope you like it.
- 7 Everything was very quiet. There was completely silence.
- 8 I tried on the shoes and they fitted me perfectly.....
- 9 Do you usually feel nervous before examinations?
- 10 I'd like to buy a car, but it's financially impossible for me at the moment.

100.4 Choose two words (one from each box) to complete each sentence.

absolutely	badly	completely	changed	cheap	damaged
reasonably	seriously	slightly	enormous	ill	long
unnecessarily	unusually		planned	quiet	

- 1 I thought the restaurant would be expensive, but it was reasonably cheap.....
- 2 Steve's mother is seriously in hospital.
- 3 What a big house! It's completely.....
- 4 It wasn't a serious accident. The car was only slightly.....
- 5 The children are normally very lively, but they're unusually quiet..... today.
- 6 When I returned home after 20 years, everything had completely.....
- 7 The film was planned..... It could have been much shorter.
- 8 A lot went wrong during our holiday because it was badly.....

in English	usage	EX	in usage	usage	Example
on	days of the week	• on Monday	In	• room, Building, street, town, country • Book, paper etc • car, taxi • picture, work	- in the kitchen in London - in the Book - in the taxi, car - in the picture
in	• months / seasons • Time of day • year • after a certain period of Time (when)	- in August / in winter - in the morning - in 2018 - in an hour	At	• meaning next to by an object • for table • " exerts • Place where you are to do sth typical (watch a film, study, work)	- At the door " " station - at the table - At the concert at the party - at the cinema, at school, at work
at	• for night • for week • a certain point of Time (when)?	- at night - at the week ends - at the Half past 9	On	• attached • for a place with a river • being on the surface • for a certain table • for a floor in a house • for public transport • for TV, radio	- The picture on the wall - London lies on the Thames - on the table - on the left - on the first floor - on the bus or a plane - on TV, on the radio
since	• for a certain point of Time (past till now)	• since 2017	By next to, Beside	• left or right of somebody or sth	Jane is standing by next to / beside the car
for	• over a certain period of Time (past till now)	- for 2 years	Under	• on the ground, lower than (or covered by) sth else.	- The bag is under the table
ago	• a certain Time in the past	- 2 years ago	Below	lower than sth else but above ground	- The fish are below the surface
before	• earlier than a certain point of Time	- before 2016	Over	• covered by sth else - meaning more than - getting to the other side - overcoming an obstacle	- put a jacket over your shirt - over 46 years of age - walk over the bridge - climb over the wall
to	• Telling the Time	- Ten to six [at six] 5:50	Above	- higher than sth else but not directly over it	- a path above the lake
past	" "	Ten past six 6:10			
from till / until	marking the beginning and end of a period of Time	From Monday to till Friday			
By	• in the sense of the latest • up to a certain Time	- I will be back by 60 - By 11 o'clock, I had read five pages			
	<u>Time</u>				

BASIC STRUCTURE OF ATOMS

Most of the atom is just empty space. The rest of the atom consists of a positively charged nucleus of protons and neutrons that are surrounded by a cloud of negatively charged electrons. The nucleus is the centre of the atom. An atom is extremely small particle of matter that retains its identity during chemical reactions.

During the latter 19th century a series of experiments showed that atoms are comprised of smaller particles. An atom consists of a nucleus and one or more electrons surrounding the nucleus.

The nucleus is the core of the atom, has the majority of the mass of the atom and a positive charge. An electron is a very light particle which circles the nucleus, it has a negative charge.

READING COMPREHENSION QUESTIONS

1. The text is about what ?
2. What does the atom made of ?
3. How many electrons does atom consists of ?
4. What kind of charge does the nucleus hold ?
5. A/ Synonyms : keep = - - - - - • made up = - - - - -
B/ Antonyms : positive ≠ - - - - - • heavy ≠ - - - - -
6. There are three (3) adverbs in the 1st paragraph. What're they ?
7. There are four (4) adjectives in the 1st paragraph. What are they ?
8. Turn this sentence into negative form and interrogative form

"the nucleus is the centre of the atom"

9. Classify the following words according to their pronunciation:

Nineteenth Latter positive light identity

/aɪ/

/ɪ/

/eɪ/

/lɪt/

/aɪ/

10. Analyse the following sentence

An atom is extremely small particle of matter that retains its identity

11. Rewrite the following arithmetic symbols into letters:

Power X^{-9} (- - - - -), X^{93} (- - - - -)

Volume X^3 (- - - - -); \sqrt{y} (- - - - -)

12. Classify the following words to adjectives, adverbs, nouns, and verbs:

To measure, shyful, lovely, heavy, nice, calm, carefully, pretty, fought, To measure, Redness, weak, widen, Beauty, power, accuracy, Hardly, Dignify, misorder, Unle, aftermath,

GRAMMAR WORKSHEET

Underline each noun in the following sentences. Then write the first letter of each noun on the line next to the sentence. If your answers are correct, you will spell out the words of a quotation and the name of the famous American who said the quotation. Write the quotation and its author's name on the lines below sentence 15.

1. _____ Wendy located her housekeeper.
2. _____ Some answers on this test are about electricity.
3. _____ Her violin and easel were missing.
4. _____ Their rabbit that left the yard was returned by the officer.
5. _____ He used this umbrella in Alabama.
6. _____ After the rain, the electrician checked the box.
7. _____ The end of the afternoon arrived quickly.
8. _____ This group is funny.
9. _____ The ostrich and the orangutan are interesting.
10. _____ My doctor and my orthodontist are neighbors.
11. _____ In the evening, Archie likes to go boating.
12. _____ Unfortunately, he had a rash and an allergy.
13. _____ Her height and agility helped her win the match.
14. _____ Linda cared for the infant throughout the night.
15. _____ The garbage carton near the oven had licorice and noodles in it.

The quotation and its author:

Verb categories

1- Transitive verb (Trans. V): Requires an object, it is not complete without it. To find the object, ask the question "what".

Eg1: They have invited their friends. Eg2: The students wrote a paragraph.

Eg3: He gave his sister a present

2- Intransitive verb (Intrans. V):an intransitive verb may have a modifier as it can be used without a modifier. Eg1: The students have left early.

Eg2: The girls came late.

3- State Verb: Requires a complement, it is not complete without a compliment. It represents the state of being person, object or animal. To find the complement, ask the question "what" or "how".

Some state verbs: To be, to seem, to get, to appear, to look. Eg: He seems I'll.

Eg1: The boy is a student.Eg2: She looks tired.

It can also represent the idea in a process: To become, to get, to grow

Eg1: He grew old.Eg2: She got a job.Eg3: He became a grownup.

Exercise: Underline all the verbs and identify their category:

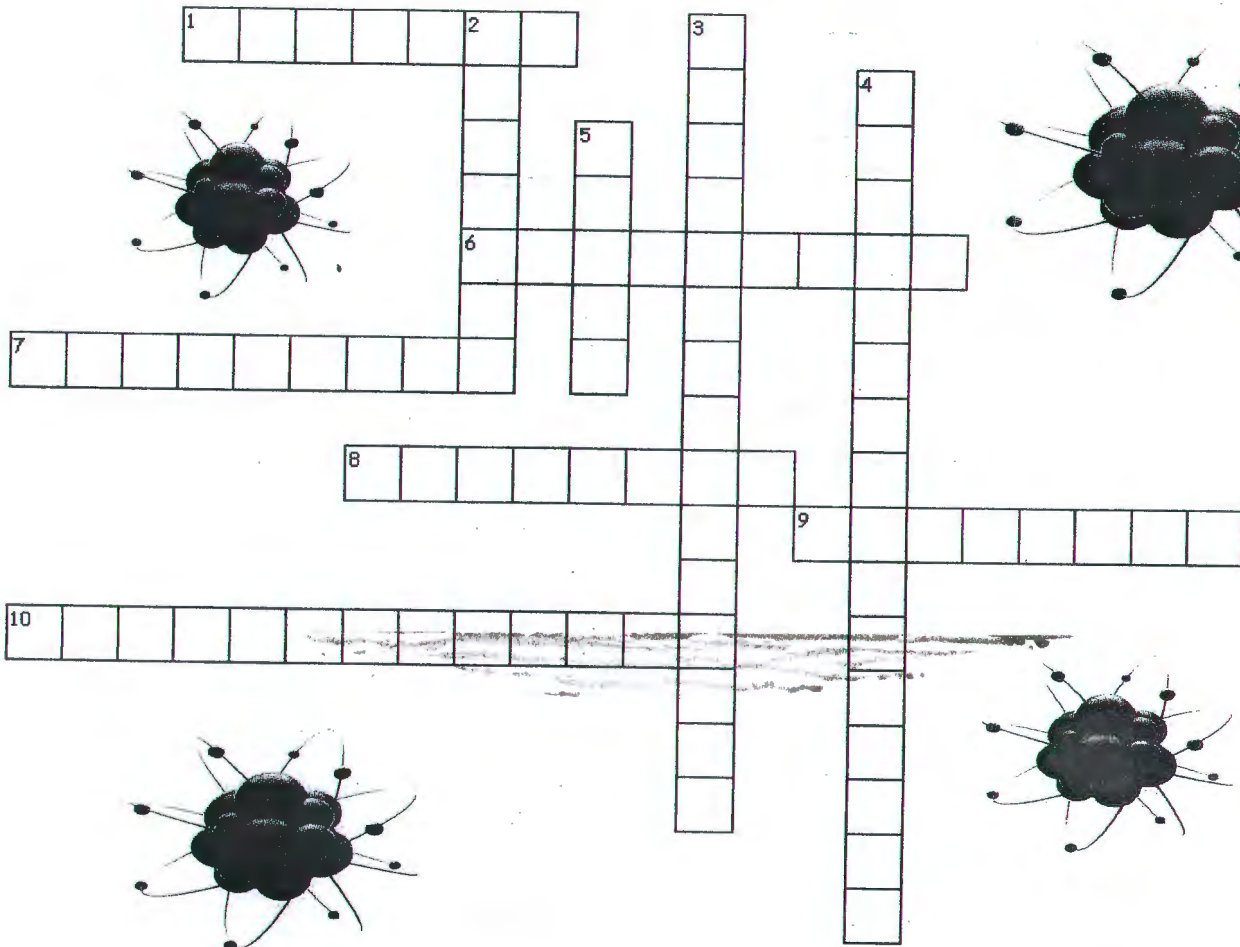
We never escape stress according to Dr. Rods, it affects us physically as well as psychologically. Doctors prescribe medication for stress.

Medicine usually lowers a patient's blood pressure. But Dr. Rods claims, "You don't always need pills, relaxation exercises are sometimes as effective as pills. For example breathing exercises relax and lower your blood pressure at the same time and it only takes a few minutes.

Name: _____

An Atom Apart

Vocabulary Crossword



Across

1. positively charged parts of an atom
6. negatively charged parts of an atom
7. atoms are the building blocks for...
8. the number of electrons in atoms determine an element's ___ properties
9. neutrally charged parts of an atom
10. a chart which lists all of the known elements

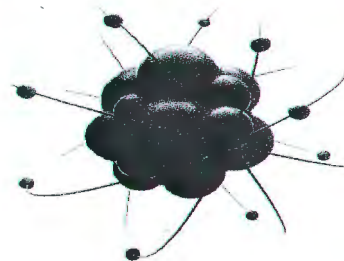
Down

2. protons and neutrons are found in this part of an atom
3. type of force that holds the nucleus of an atom together
4. area of science that studies tiny particles like atoms
5. the word 'atomos' comes from this language

ANSWER KEY

An Atom Apart

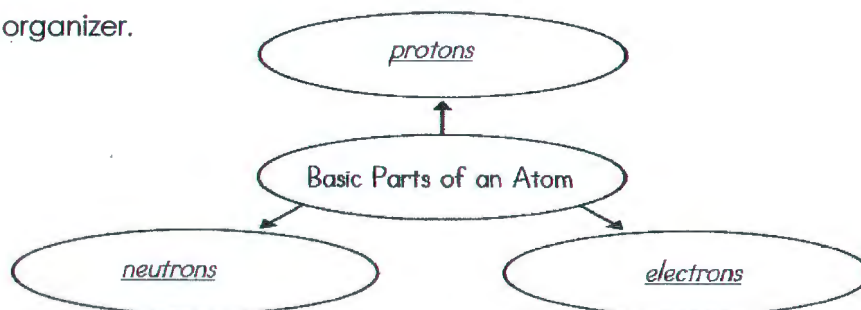
by Leslie Cargile



1. What are atoms? **a**
- a. tiny particles that make up all matter
 - b. tiny particles that can only be seen with a microscope
 - c. tiny particles that look like gnats
 - d. particles that are so large they cannot be seen

2. What does the word *Atomos* mean in ancient Greece?
something that cannot be divided further

3. Complete the graphic organizer.



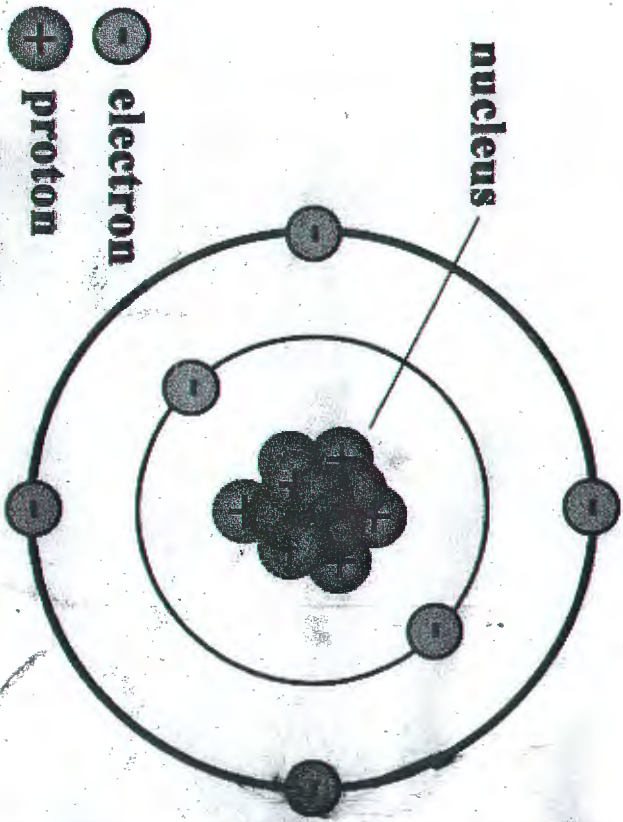
4. What is quantum mechanics?
The study of atoms and tiny particles that are even smaller than atoms.

5. If you wanted to find the chemical element of an atom, you would need to... **b**
- a. know how many electrons it has
 - b. **know how many protons it has**
 - c. know its melting temperature
 - d. see it with a microscope

6. The author begins this article by comparing a cloud of gnats to an atom. In this scenario, what do the gnats represent? What does the person walking through the gnats represent?
The gnats represent electrons. The person represents the nucleus of the atom.

Something to Think About: If you discovered a new element that was added to the periodic table, what would you name it?

Figure over =



Atom Particles

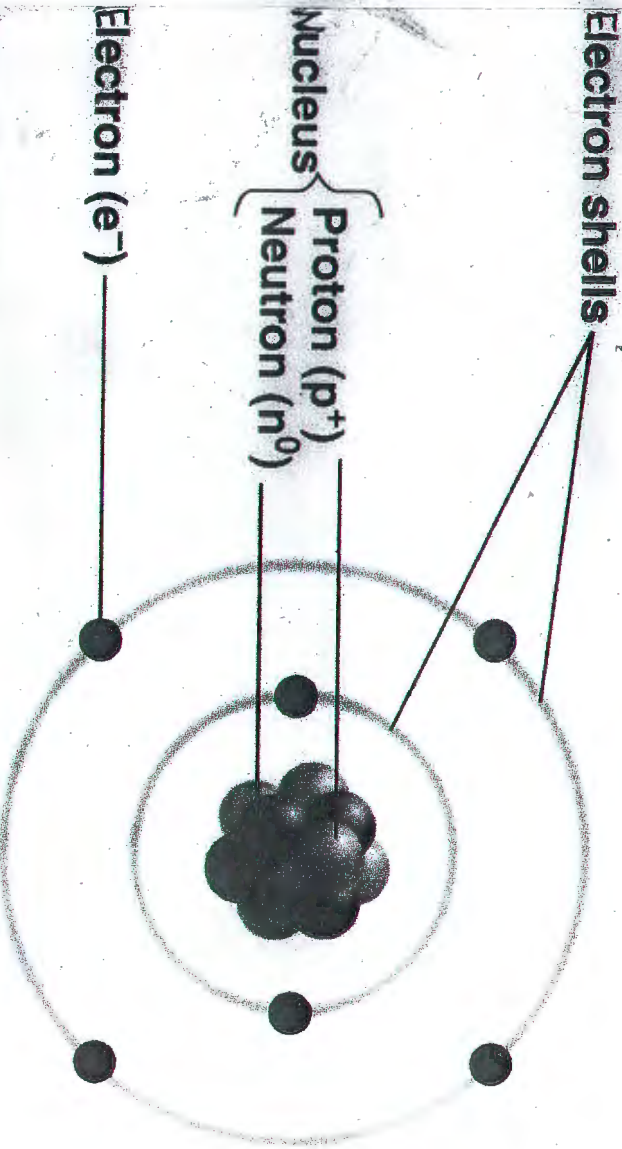
to nucleus

Buzzle.com

near by
to determine the middle of the atom

ask the questions

Figure over =



can emit / cosmic rays

substance

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Name: _____

An Atom Apart

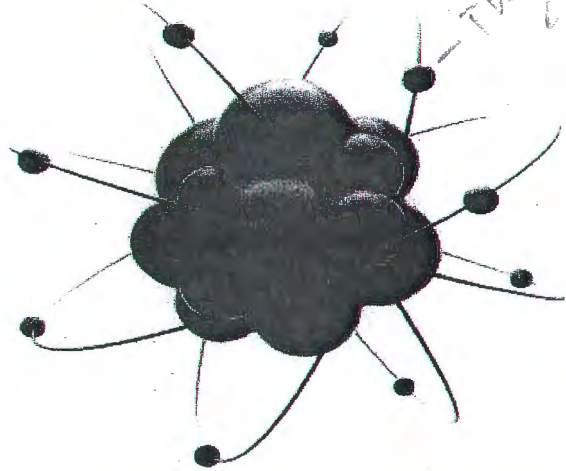
Have you ever walked through a cloud of gnats on a hot summer, only to have them follow you? No matter how you swat at them, or even if you run, they won't leave you alone. If so, then you have something in common with an atom.

Atoms are the building blocks of molecules, which when combined, make up everything. From the smallest one-celled amoeba, to every person who has ever lived, to the largest and brightest stars in the sky, atoms are everywhere.

Even way back in the time of ancient Greece, they wondered about atoms. That's where the word comes from, ancient Greece. The word *atomos*, when translated into English, means: *something that cannot be divided any further*. So what's an atom look like? Up until very recently no one could say one way or another.

Technically we can't see individual atoms, since there are no microscopes powerful enough. Since technology improves all the time, it may not be long before we can actually see a whole atom through a special microscope. Even though scientists cannot see atoms with microscopes, they have developed ways to detect them and learn about them.

Atoms are made up of three basic parts; protons, neutrons, and electrons. There is a core, or *nucleus*, and an electron cloud. The nucleus is made up of positively charged protons and neutral neutrons. The nucleus is held closely together by *electromagnetic force*.



Protons and neutrons make up the nucleus of the atom. A cloud of electrons orbits the nucleus.

The negatively charged electrons are bound to the nucleus, and zip around it in a cloud. Do you remember the cloud of gnats? The gnats would be the electrons zipping around you, the nucleus.

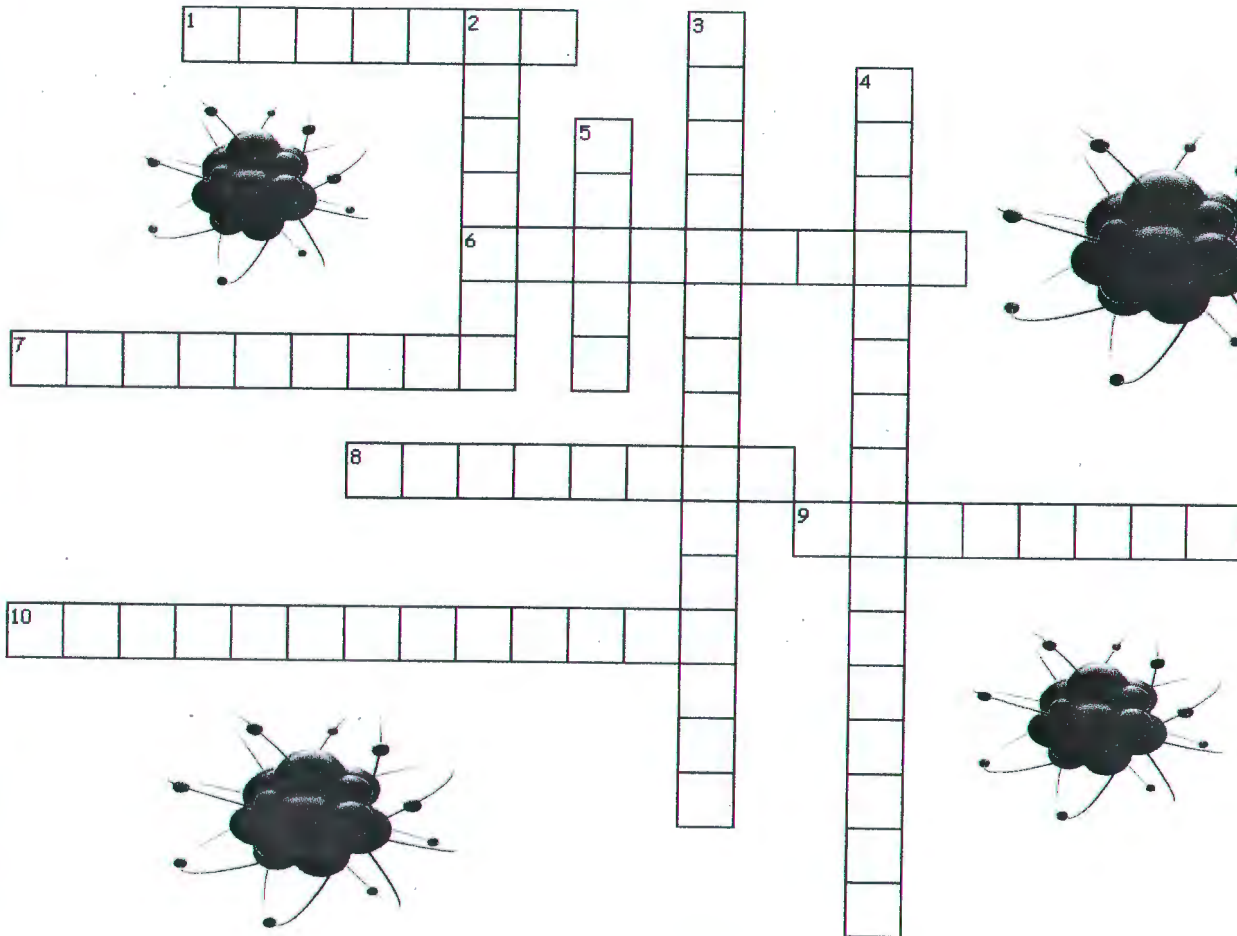
There are different ways atoms are classified. They can be classified into elements, like oxygen, carbon, or hydrogen. All of the elements known to man so far can be found on the periodic table. The number of protons an atom has decides the chemical element. The number of electrons defines the atom's chemical properties, like its melting temperature and boiling point.

The study of atoms and tiny particles that are even smaller is called quantum mechanics. Scientists still have much to learn about atoms. Maybe you will enter the study of quantum mechanics and find a brand new element. Maybe they'll even name it after you!

Name: _____

An Atom Apart

Vocabulary Crossword



Across

1. positively charged parts of an atom (**protons**)
6. negatively charged parts of an atom (**electrons**)
7. atoms are the building blocks for... (**molecules**)
8. the number of electrons in atoms determine an element's ___ properties (**chemical**)
9. neutrally charged parts of an atom (**neutrons**)
10. a chart which lists all of the known elements (**periodic table**)

Down

2. protons and neutrons are found in this part of an atom (**nucleus**)
3. type of force that holds the nucleus of an atom together (**electromagnetic**)
4. area of science that studies tiny particles like atoms (**quantum mechanics**)
5. the word a'tomos comes from this language (**Greek**)