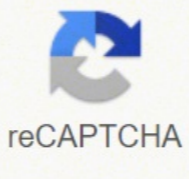




I'm not robot



reCAPTCHA

Open

Scandium	Sc	45	21	21	21
Titanium	Ti	48	22	22	22
Vanadium	V	51	23	23	23
Chromium	Cr	54	24	24	24
Manganese	Mn	55	25	25	25
Iron	Fe	56	26	26	26
Cobalt	Co	59	27	27	27
Nickel	Ni	58	28	28	28
Copper	Cu	63	29	29	29
Zinc	Zn	65	30	30	30
Gallium	Ga	69	31	31	31
Germanium	Ge	72	32	32	32
Arsenic	As	75	33	33	33
Selenium	Se	78	34	34	34
Bromine	Br	79	35	35	35
Krypton	Kr	84	36	36	36
Rubidium	Rb	85	37	37	37
Strontium	Sr	88	38	38	38
Yttrium	Y	89	39	39	39
Zirconium	Zr	90	40	40	40
Niobium	Nb	93	41	41	41
Molybdenum	Mo	96	42	42	42
Technetium	Tc	98	43	43	43
Ruthenium	Ru	101	44	44	44
Rhodium	Rh	103	45	45	45
Palladium	Pd	106	46	46	46
Silver	Ag	108	47	47	47
Cadmium	Cd	112	48	48	48
Indium	In	115	49	49	49
Tin	Sn	119	50	50	50
Antimony	Sb	122	51	51	51
Tellurium	Te	128	52	52	52
Iodine	I	127	53	53	53
Xenon	Xe	131	54	54	54
Cesium	Cs	133	55	55	55
Barium	Ba	137	56	56	56
Lanthanum	La	139	57	57	57
Cerium	Ce	140	58	58	58
Praseodymium	Pr	141	59	59	59
Neodymium	Nd	142	60	60	60
Europium	Eu	152	61	61	61
Gadolinium	Gd	157	62	62	62
Terbium	Tb	159	63	63	63
Dysprosium	Dy	163	64	64	64
Ytterbium	Yb	173	65	65	65
Lutetium	Lu	175	66	66	66
Hafnium	Hf	178	68	68	68
Tantalum	Ta	182	69	69	69
Tungsten	W	184	70	70	70
Rhenium	Rh	187	71	71	71
Osmium	Os	190	72	72	72
Iridium	Ir	192	73	73	73
Rhodium	Rh	193	74	74	74
Palladium	Pd	195	75	75	75
Silver	Ag	197	76	76	76
Cadmium	Cd	198	77	77	77
Indium	In	201	78	78	78
Tin	Sn	206	79	79	79
Antimony	Sb	207	80	80	80
Tellurium	Te	209	81	81	81
Iodine	I	210	82	82	82
Xenon	Xe	212	83	83	83
Bismuth	Bi	214	84	84	84
Polonium	Po	210	84	84	84
Astatine	At	210	85	85	85
Radium	Ra	226	88	88	88
Actinium	Ac	227	89	89	89
Thorium	Th	232	90	90	90
Protactinium	Pa	231	91	91	91
Uranium	U	238	92	92	92
Neptunium	Np	237	93	93	93
Plutonium	Pu	244	94	94	94
Americium	Am	243	95	95	95
Curium	Cm	247	96	96	96
Berkelium	Bk	247	97	97	97
Californium	Cf	251	98	98	98
Einsteinium	Es	252	99	99	99
Fermium	Fm	253	100	100	100
Mendelevium	Md	258	101	101	101
Nobelium	Nb	259	102	102	102
Livermorium	Lv	260	103	103	103
Tennessine	Ts	261	104	104	104
Oganesson	Og	264	104	104	104

Read - Match

CHOWDER

Describe - Create

The characters

Read and match

1. She is the apprentice to Ms Endive. She's convinced that Chowder is her boyfriend and takes every opportunity to let him know this.
2. Chowder's best friend and pet, he's a floating stink cloud. Most people don't want to be around him, but Chowder doesn't mind his smell.
3. He is the very excitable, young apprentice of legendary chef Mung Daal. He loves food and dreams of becoming a great chef one day.
4. He can be a bit scatterbrained, but when it comes to cooking, he knows more than anyone else. He pours his heart into every dish. He thinks he's a ladies man and frequently offers Chowder advice about finding love.
5. He's a big, heavy rock monster who works in Mung Daal's kitchen. He doesn't have much of a sense of humor, and Chowder is always getting on his nerves.
6. Mung Daal's wife likes to be the boss and has a very competitive streak. While Mung Daal handles the cooking, she takes care of everything else.

AP PHYSICS – OPTICS

LIGHT: (reflection, refraction, mirrors, lenses, diffraction/interference)

Topics: Plane mirrors, spherical mirrors (concave and convex), refraction, lenses (converging and diverging), multiple lens systems, diffraction, interference patterns through slits

Worksheets/Labs/Quizzes:

1. Mirror Lab
2. Mirrors – Ray Diagram Practice
3. Index of refraction table
4. Refraction diagrams wksht
5. Mini labs (2) law of refraction / critical angle
6. Refraction Review
7. Concepts review – mirrors/refraction
8. Optics QUIZ mirrors/refraction
9. Multiple lenses 1
10. Multiple Lenses 2
11. Lenses wksht 3
12. Geo optics review
13. Unit Review sheet

Introduction:

Light has both wave and particle properties. We are going to look at the wave properties in this unit.

Another example of a wave is sound. If I talk, turned around, you still hear me. If I face one side of the room and talk, the other side still hears me. This is because waves naturally spread out as they propagate (travel).

Light is no different. For example, a light bulb, light propagates from the bulb in all directions.

If one follows a part of the wave, we can draw an arrow following its path. The line will be parallel to the wave front. This is called a Ray

Ray - An arrow drawn perpendicular to the wave front. The arrow points toward the direction of propagation of the wave.

Ray Diagram – An easy way to visualize how waves reflect and refract.

Waves (Light waves in this case) can do three things:

Reflect, Refract, and Diffract

Reflection: The ray bounces off an object.

Law of Reflection: The angle of incidence = the angle of reflection. $\theta_i = \theta_r$.

law of reflection : $\theta_i = \theta_r$




10 Winter Facts

- Winter is the coldest season.
- Snow falls in the Winter.
- Every snowflake has six sides.
- The sun looks bigger in the Winter.
- Trees stop growing in the winter.
- Plants stop growing in the Winter.
- Nights are longer in the Winter.
- Some animals hibernate in the Winter.
- Winter comes before Spring.
- A blizzard is a bad snowstorm.



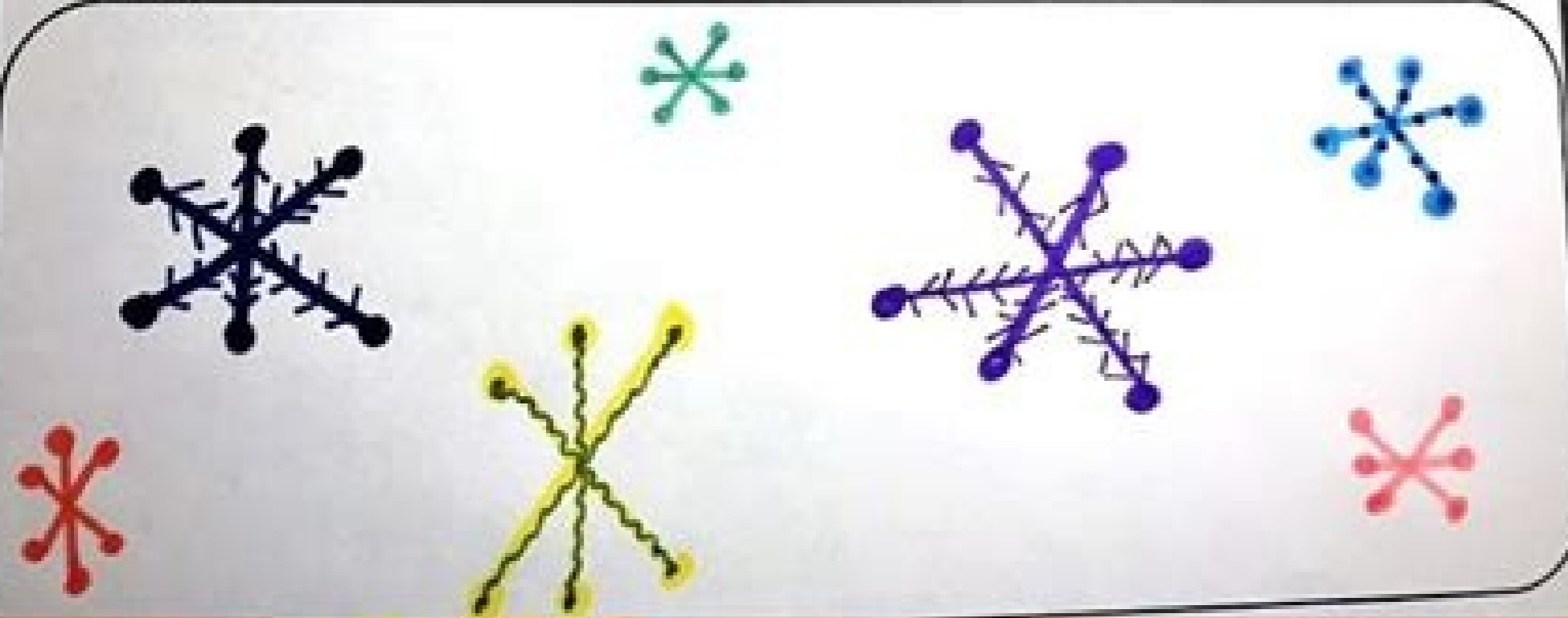
© 2016, Sarah Griffin

Name _____ Build a Sentence ©2016, Sarah Griffin Illustrate

1. Build Every snowflake has six sides. 

Every | snowflake | has | six | sides

2. Draw




Name _____ Illustrate

Nights are longer in the Winter. 

1. Build Nights are longer in the Winter

2. Draw



Daughters and Kindergarten



ambition? What are they most afraid of people finding out? What do they want the most? What's their biggest flaw? What for? How do they approach: power? Think of it as a kind of offender profile — one that can help you spot your character in the middle of a crowded Times Square. Otherwise, this character bible will start with the eagle eye's view of your character. If you treat a person like an apple, they're going to have three layers of depth: the "skin," the "flesh," and the "core." (Otherwise known as their physical appearance, backstory, and psychology.) That's how this character template is structured — and if you have a particular area that you'd like to hone, you can skip to it below. What are their names and ages? Your health? Only use what's relevant to the actual story — otherwise you risk turning off readers with the dreaded "info dump." But the author always needs to understand their characters like the back of their hands. Describe the character's bucket list at the ages of 15, 20, 30, and 40. Do they have an accent? Takes one minute! Part 2: The Flesh Characters don't exist in a vacuum — they're a product of their environment. What's their health like? List the last 10 books they read. Which fictional world would they most wish to visit? Twenty years? They have a resting _____ face. This section in the character profile worksheet covers the "heart" of your character. What are any distinguishing speech "tics"? Who were their role models growing up? Who would be their ideal partner? Who is their significant other? What's their saddest memory? The audience will only see a fraction (maybe 10%) of all that the writer knows about their character. authority figures? Why? Describe the major turning points or "life beats" in childhood. What's the point of filling out a character template? List their criminal record. ☼ FAMILY Father Age (if living) Occupation Briefly describe their relationship with your character Mother Age (if living) Occupation Briefly describe their relationship with your character Siblings How many? Any speech impediments? Describe their smile? What do they tend to find funny? THE BASICS Name Age Place of birth Current location Nationality Education Occupation Income PHYSICAL APPEARANCE What's their: eye color? Vault's 101 Behavioral Questions What it is: A set of 101 interview questions from career site, Vault. moral support? Your dreams? When you make a big sacrifice, do you tell people about it or keep it to yourself? Arthur Aron's Intimacy Test What it is: A questionnaire of 36 questions that the New York Times in 2015 said would break down emotional barriers and accelerate intimacy between two strangers. emotional support? which contemporary author are you? Why create a character profile? What would you never willingly sacrifice? Review our profile on Congresswoman and first Black presidential candidate Shirley Chisholm, and answer questions to reinforce understanding. children? How emotive are they? If a crystal ball could tell you the truth about yourself your life, the future, or anything else, what would you want to know? What were their hobbies growing up? Favorite place to be as a child? How would they fill out an online dating profile for themselves? What's their role in a group dynamic? Leader Joker Parent Hype man Mooch Other? Then there's the character template that asks you, "If your character was a color, what color would they be?" Once you start answering those kinds of questions in a character template, you might be dealing with overkill. Some sample questions: Is there something that you've dreamed of doing for a long time? Tell us about your book, and we'll give you a writing playlist It'll only take a minute! So what makes a good character profile? mentoring a wingman? Do you have any dependable character questions that our questionnaire lacks? build? love? What's their favorite quote? Do they want to be remembered? What are their skeletons in the closet? If they could change one thing from their past, what would it be? In Creating Unforgettable Characters: A Practical Guide to Character Development, Linda Seger compares the depth of a character to an iceberg. That's the goal of this section, which covers the "skin" of your character: everything from their outer appearance to the way that they speak. Take our 1-minute quiz below to find out! ☐ Which contemporary author are you? But sharp character development is also one of the toughest hills to climb, especially if you've struggled to think through those tried-and-true questions that keep you up at night: Are my characters convincing? There are a lot of character bibles out there — some are good. Only when agitated or eager Doesn't gesture Compulsive "hand-talker" Controlled, only to make a point Other? What advice would they give to their younger self? If you're looking to hone your characters even further, here are seven of the best character development exercises. It won't move the needle at all when it comes to character development. What was the situation and how did you handle it? Have you used a character profile or a character bible to develop your characters before? Are they: Street-smart or book-smart An optimist or pessimist Introverted or Extroverted What is their favorite sound? Favorite place in the world? What secrets do they keep? Keep an open mind as you work through every question and you'll be on your way to creating well-drawn, interesting characters in no time at all. Describe them. How many people would attend their funeral? Those are the kinds of characters our character bible is here to help you write. Describe them. ☼ How are they perceived by: strangers in the street? How strong is their moral compass? Briefly describe their relationship(s) with your character Children (if applicable) Age (if living) Occupation Briefly describe their relationship with your character Extended family Grandparents Uncles and aunts Cousins Other What's their family's economic status? How often do they see their family in a year? Some sample questions: What do you regard as the lowest depth of misery? Why do they want it? How easily can others to read them? If so, explain. At graduation, they were named Most Likely To _____ in the yearbook. Jobs (if applicable)? What's their laugh like? Every other answer in the character template builds up to this. If you're having these doubts, you might want to turn to the age-old solution: a character profile. extended family? the opposite sex? Your integrity? With this in mind, we built a character profile worksheet in three parts. What is

the trait you most deplore in others? This section in the character template dives a bit deeper into your character and covers their “flesh”: the people, and formative influences that filled them out and made them who they are today. And if you lose physical sight of this character template, don't sweat because we made it a portable resource for you. In this post, we take you through all the steps that creating a character profile requires — and give you a character template that you can use with any story you're writing. Tell us in the comments below! What social media platforms are they on? Describe them. What's their greatest regret? What's their catchphrase? What's their biggest fear? What's their biggest strength? What is their biggest accomplishment? What is their idea of perfect happiness? What would their résumé look like? What was their dream job as a child? Simply save it on to your computer and start typing in the text boxes to start developing your character. THE PAST What's the name of their hometown? What type of childhood did they have (sheltered, neglected, etc.)? What's the style of their speech (elevated, educated, peppered with slang, etc.)? Additional resources If you're in an interrogatory mood and want even more questions outside of this character template, we've got your back. Why? This is critical information to know because it'll make up the unshakable foundation — and raison d'être — for your story. Do they wear their emotions on their sleeve? How would they use their social media platforms? Describe their education? Were they involved in organizations and clubs at school? Who are their other significant friends? Enemies? hair style? Describe them. If you felt their criticisms were unjustified, would you defend the person? How do I make sure my character has an arc? Your life? How quickly do they respond to emails? What do they want from a relationship? I never end up using all the information in my story, anyway! That's true. What are three adjectives to describe them as a child? friends in their friend circles? EXTERNAL RELATIONSHIPS Who are their closest friends? On what occasion do you lie? In an elevator, do they push the elevator button more than once? What would they want their tombstone to say? Tell me about yourself in 30 seconds. acquaintances at a work function? Of all the people in your family, whose death would you find most disturbing? Do they have any distinguishing “tics” and mannerisms? Whenever you feel like your story is straying off course, go straight back to your character's story goal and motivation. In fact, you shouldn't try to pack every character detail into your novel. change? What is the one object or possession that they would rescue from their burning home? What (or who) bores them? What makes them angry? What do they look for in a person? What's their preferred curse word? What's their preferred outfit? Twitter Tumblr Facebook Reddit Instagram Snapchat Other? When, specifically, are they willing to compromise their morals? What's their clearest memory? Let's begin. Some sample questions: Where do you see yourself in ten years? If a backstory shapes a dynamic character, this will define them. Sports Debate Gay / Straight Alliance Model UN Drama Other? Here are some more famous tests with which to quiz your character — and a character bible or two for your further perusal! The Proust Questionnaire What it is: A set of questions popularized by Marcel Proust that digs into an individual's personality. Speaking of great characters... THE PRESENT AND FUTURE What is their story goal? A better character profile is one that actually helps you build a holistic picture of your character in the context of your story. Are you able to separate sex from love? What's their earliest memory? Do they gesture? Why haven't you done it? Who do they depend on for: practical advice? And if you'd like to download it nicely formatted for you already in a PDF format, feel free to do so below! Ready? What are their pet peeves? If they won the lottery, what would they do? SPEECH AND COMMUNICATION How do they talk (rapid, slow, measured, drawl, etc.)? Do they suffer from chronic illnesses? Describe their handwriting (sloppy, neat, careful, unintelligible). How do they walk? Confident, powerful strides Lazy stroll Fast, walks at a clip Distracted, eyes on the ground Other? But the remaining 90% is what makes characters actually feel well-drawn, flawed, and real — as though they could live outside of the book itself. It's the springboard to your character's biography. If they didn't have to sleep, what would they do with the extra time? Ask any great novelist and they'll likely tell you that good writing starts with good characters. Do they wear glasses? What accessories are ALWAYS associated with them (cane, pipe, necklace, etc.)? What's their usual level of grooming? Tell me about a time you had to break a promise. Do they have any distinguishing features (tattoos, scars, birthmarks)? PART 1: The Outer Layer, or Physical AppearancePART 2: The Flesh, or BackstoryPART 3: The Core, or Psychology Part 1: The Outer Layer To be able to identify a criminal, detectives build a painstakingly thorough file of said criminal's physical characteristics. What's their happiest memory? List the 10 songs that would occupy their All-Time Most Played playlist on Spotify. What is the best compliment that someone ever paid them? Disheveled Smart, very put together Untidy but clean Other? The Book of Questions What it is: A series of questions by Gregory Stock that was initially published in 1987. Posture: Stiff, military Slouching Casual and relaxed 'Turtle,' tired Other? (answer in a single paragraph) Story motivation (answer in a single paragraph) In other words: what does your character want in the story? PSYCHOLOGY What do they do on rainy days? If so, explain: How much eye contact that they like to make (direct, shifty, etc.)? Do my characters have depth? Find out which of today's greats is your writerly match. colleagues in the office? (Note: you can find a PDF of 300+ questions here.) Some sample questions: At a meal, your friends start belittling a common acquaintance. Bitch Angel Neutral Other? If so, explain. Part 3: The Core We've come now to the “core”: who your character is deep down. The Ultimate Character Profile Template This downloadable character profile template will come as a fillable PDF file. More importantly, it will help inform the two most important points leading up to your novel: the character's story goal and story motivation.