

## 6<sup>th</sup> Grade Summer Assignment, 2011

Welcome to 6<sup>th</sup> grade at the NYC Lab School! Attached you will find the summer assignments for the incoming 6<sup>th</sup> grade class. We hope that you while you enjoy your summer, you complete these assignments with effort, enthusiasm, and care.

Please bring this **completed packet** to your **first day of class on Wednesday, September 7, 2011.**

Name \_\_\_\_\_  
HR \_\_\_\_\_

Date \_\_\_\_\_  
Science

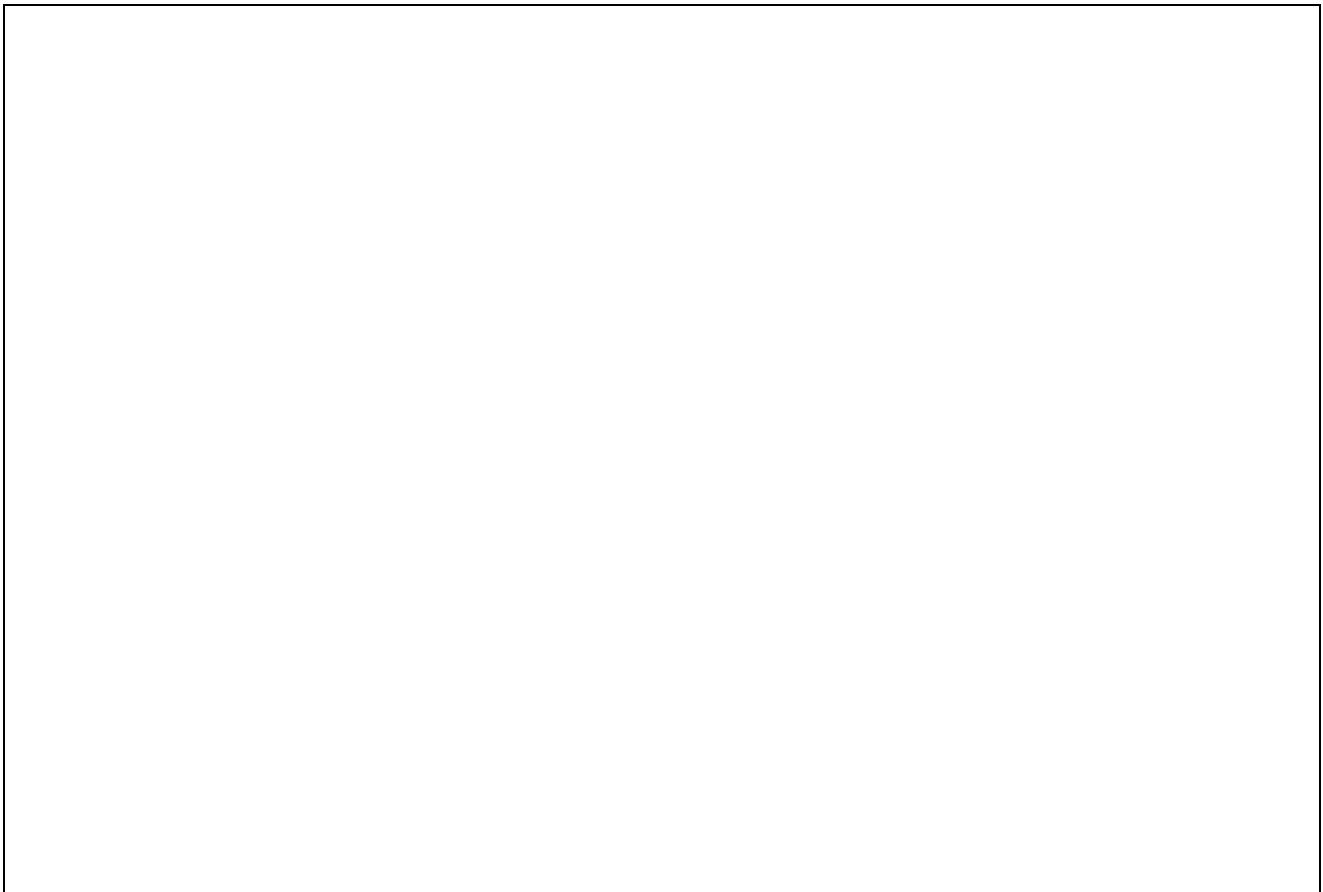
## 6<sup>th</sup> Grade Science Summer Assignment, 2011

Welcome 6<sup>th</sup> grade scientists! Over the summer your science teachers would like for you to begin preparing for the upcoming school year. **Please bring this assignment with you on the first day of school.**

**Part I:** Spend some time thinking about the following:

When you picture a scientist in **your** mind, what do they look like?

**Part II:** Illustrate a detailed, vivid picture of **your** image of a scientist in the box below.



**Part III:** In 3-4 complete sentences describe the type of work that your scientist might do.

---

---

---

---

---

Name \_\_\_\_\_  
HR \_\_\_\_\_

Date \_\_\_\_\_  
Math \_\_\_\_\_

## 6<sup>th</sup> Grade Math Summer Assignment, 2011

Complete this multiplication table.

<b>x</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>1</b>										
<b>2</b>						<b>12</b>				
<b>3</b>										
<b>4</b>										
<b>5</b>				<b>20</b>						
<b>6</b>										
<b>7</b>										
<b>8</b>										
<b>9</b>										
<b>10</b>										

A Tangle Table is a multiplication table with a twist. The numbers have lost their traditional order. Yet, you can figure out where every number belongs. The first row contains the numbers 1-10, but not necessarily in that order. The first column also contains the numbers 1-10, but not necessarily in that order. Each of the numbers 1-10 can only be used once. Please fill in all the factors and products.

**Tangle Table #1**

<b>x</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>7</b>	<b>9</b>					
			<b>25</b>							
						<b>16</b>				
		<b>9</b>					<b>24</b>			
<b>8</b>				<b>56</b>						
			<b>35</b>					<b>14</b>	<b>42</b>	
	<b>2</b>									
<b>10</b>				<b>70</b>						
					<b>54</b>					
					<b>81</b>					
										<b>10</b>

### Tangle Table 2

For Tangle Tables 2, 3, 4 and 5 the first row and first column contain the numbers 1-12, but not necessarily in that order. Each of the numbers 1-12 can only be used once.

X	11	4	2	3		8	6	12			7	1
4												
11		44										
		12										
					70							
12						96						
									9	5		
10												
									54			
9												
8												
											14	
5												

### Tangle Table 3

X	1	12	5	10	9		11			7		3
		132										
2												
				90								
6												
						56						
10												
5								30	20			
12												
											6	
8												
											2	
4												

**Tangle Table 4**

X	2	4	6	8	10	12						
							49					
								121				
									81			
										1		
											9	
												25
	12											
		48										
			48									
						120						
				32								
					20							

**Tangle Table 5    \*\*\*CHALLENGE\*\***

X												
	4											
		144										
			121									
				9								
					25							
						16						
							100					
								36				
									49			
										81		
											64	
												1

## 6<sup>th</sup> Grade Humanities Summer Assignment, 2011

### PART ONE: "Through the Tunnel"

#### Directions for completing the assignment:

Read the story, "Through the Tunnel" by Doris Lessing, *twice*.

1. The first time you read it, simply enjoy the story.
2. During your second reading, keep in mind the following tasks and then respond to them in writing (**typed** or neatly **handwritten** on loose-leaf paper).

Your response to Part One should be **no more than two pages total**.

#### Your tasks:

1. Choose **3-5 new vocabulary words** to define.
  - Circle or highlight them in the text of the story.
  - Look up each word in a dictionary and neatly copy down the clearest definition.
2. In the story, Jerry makes an important decision—he decides to attempt to go through the tunnel: "*He would do it. He would do it if it killed him, he said defiantly to himself.*"
  - Jerry takes a big risk. **In 2 well-written paragraphs**, answer both of the following questions:
    - Do you think he made the right choice? Explain why or why not.
    - If you were in Jerry's position, would you have made the same choice? Explain.

## Through the Tunnel

By Doris Lessing

Going to the shore on the first morning of the holiday, the young English boy stopped at a turning of the path and looked down at a wild and rocky bay, and then over to the crowded beach he knew so well from other years. His mother walked on in front of him, carrying a bright-striped bag in one hand. Her other arm, swinging loose, was very white in the sun. The boy watched that white, naked arm, and turned his eyes, which had a frown behind them, toward the bay and back again to his mother. When she felt he was not with her, she swung around. "Oh, there you are, Jerry!" she said. She looked impatient, then smiled. "Why, darling, would you rather not come with me? Would you rather-" She frowned, conscientiously worrying over what amusements he might secretly be longing for which she had been too busy or too careless to imagine. He was very familiar with that anxious, apologetic smile. Contrition sent him running after her. And yet, as he ran, he looked back over his shoulder at the wild bay; and all morning, as he played on the safe beach, he was thinking of it.

Next morning, when it was time for the routine of swimming and sunbathing, his mother said, "Are you tired of the usual beach, Jerry? Would you like to go somewhere else?"

"Oh, no!" he said quickly, smiling at her out of that unfailing impulse of contrition - a sort of chivalry. Yet, walking down the path with her, he blurted out, "I'd like to go and have a look at those rocks down there."

She gave the idea her attention. It was a wild-looking place, and there was no one there, but she said, "Of course, Jerry. When you've had enough come to the big beach. Or just go straight back to the villa, if you like." She walked away, that bare arm, now slightly reddened from yesterday's sun, swinging. And he almost ran after her again, feeling it unbearable that she should go by herself, but he did not.

She was thinking, Of course he's old enough to be safe without me. Have I been keeping him too close? He mustn't feel he ought to be with me. I must be careful.

He was an only child, eleven years old. She was a widow. She was determined to be neither possessive nor lacking in devotion. She went worrying off to her beach.

As for Jerry, once he saw that his mother had gained her beach, he began the steep descent to the bay. From where he was, high up among red-brown rocks, it was

a scoop of moving bluish green fringed with white. As he went lower, he saw that it spread among small promontories and inlets of rough, sharp rock, and the crisping, lapping surface showed stains of purple and darker blue. Finally, as he ran sliding and scraping down the last few yards, he saw an edge of white surf, and the shallow, luminous movement of water over white sand, and, beyond that, a solid, heavy blue.

He ran straight into the water and began swimming. He was a good swimmer. He went out fast over the gleaming sand, over a middle region where rocks lay like discoloured monsters under the surface, and then he was in the real sea - a warm sea where irregular cold currents from the deep water shocked his limbs.

When he was so far out that he could look back not only on the little bay but past the promontory that was between it and the big beach, he floated on the buoyant surface and looked for his mother. There she was, a speck of yellow under an umbrella that looked like a slice of orange peel. He swam back to shore, relieved at being sure she was there, but all at once very lonely.

On the edge of a small cape that marked the side of the bay away from the promontory was a loose scatter of rocks. Above them, some boys were stripping off their clothes. They came running, naked, down to the rocks. The English boy swam towards them, and kept his distance at a stone's throw. They were of that coast, all of them burned smooth dark brown, and speaking a language he did not understand. To be with them, of them, was a craving that filled his whole body. He swam a little closer; they turned and watched him with narrowed, alert dark eyes. Then one smiled and waved. It was enough. In a minute, he had swum in and was on the rocks beside them, smiling with a desperate, nervous supplication. They shouted cheerful greetings at him, and then, as he preserved his nervous, uncomprehending smile, they understood that he was a foreigner strayed from his own beach, and they proceeded to forget him. But he was happy. He was with them.

They began diving again and again from a high point into a well of blue sea between rough, pointed rocks. After they had dived and come up, they swam around, hauled themselves up, and waited their turn to dive again. They were big boys — men to Jerry. He dived, and they watched him, and when he swam around to take his place, they made way for him. He felt he was accepted, and he dived again, carefully, proud of himself.

Soon the biggest of the boys poised himself, shot down into the water, and did not come up. The others stood about, watching. Jerry, after waiting for the sleek brown head to appear, let out a yell of warning; they looked at him idly and turned their eyes back towards the water. After a long time, the boy came up on the other

side of a big dark rock, letting the air out of his lungs in a spluttering gasp and a shout of triumph. Immediately, the rest of them dived in. One moment, the morning seemed full of chattering boys; the next, the air and the surface of the water were empty. But through the heavy blue, dark shapes could be seen moving and groping.

Jerry dived, shot past the school of underwater swimmers, saw a black wall of rock looming at him, touched it, and bobbed up at once to the surface, where the wall was a low barrier he could see across. There was no one visible; under him, in the water, the dim shapes of the swimmers had disappeared. Then one, and then another of the boys came up on the far side of the barrier of rock, and he understood that they had swum through some gap or hole in it. He plunged down again. He could see nothing through the stinging salt water but the blank rock. When he came up, the boys were all on the diving rock, preparing to attempt the feat again. And now, in a panic of failure, he yelled up, in English, "Look at me! Look!" and he began splashing and kicking in the water like a foolish dog.

They looked down gravely, frowning. He knew the frown. At moments of failure, when he clowned to claim his mother's attention, it was with just this grave, embarrassed inspection that she rewarded him. Through his hot shame, feeling the pleading grin on his face like a scar that he could never remove, he looked up at the group of big brown boys on the rock and shouted, "*Bonjour! Merci! Au revoir! Monsieur, monsieur!*" while he hooked his fingers round his ears and waggled them.

Water surged into his mouth; he choked, sank, came up. The rock, lately weighed with boys, seemed to rear up out of the water as their weight was removed. They were flying down past him, now, into the water; the air was full of falling bodies. Then the rock was empty in the hot sunlight. He counted one, two, three . . . .

At fifty, he was terrified. They must all be drowning beneath him, in the watery caves of the rock! At a hundred, he stared around him at the empty hillside, wondering if he should yell for help. He counted faster, faster, to hurry them up, to bring them to the surface quickly, to drown them quickly - anything rather than the terror of counting on and on into the blue emptiness of the morning. And then, at a hundred and sixty, the water beyond the rock was full of boys blowing like brown whales. They swam back to the shore without a look at him.

He climbed back to the diving rock and sat down, feeling the hot roughness of it under his thighs. The boys were gathering up their bits of clothing and running off along the shore to another promontory. They were leaving to get away from him. He cried openly, fists in his eyes. There was no one to see him, and he cried himself out.

It seemed to him that a long time had passed, and he swam out to where he could see his mother. Yes, she was still there, a yellow spot under an orange umbrella. He swam back to the big rock, climbed up, and dived into the blue pool among the fanged and angry boulders. Down he went, until he touched the wall of rock again. But the salt was so painful in his eyes that he could not see.

He came to the surface, swam to shore and went back to the villa to wait for his mother. Soon she walked slowly up the path, swinging her striped bag, the flushed, naked arm dangling beside her. "I want some swimming goggles," he panted, defiant and beseeching.

She gave him a patient, inquisitive look as she said casually, "Well, of course, darling."

But now, now, now! He must have them this minute, and no other time. He nagged and pestered until she went with him to a shop. As soon as she had bought the goggles, he grabbed them from her hand as if she were going to claim them for herself, and was off, running down the steep path to the bay.

Jerry swam out to the big barrier rock, adjusted the goggles, and dived. The impact of the water broke the rubber-enclosed vacuum, and the goggles came loose. He understood that he must swim down to the base of the rock from the surface of the water. He fixed the goggles tight and firm, filled his lungs, and floated, face down, on the water. Now he could see. It was as if he had eyes of a different kind — fish eyes that showed everything clear and delicate and wavering in the bright water.

Under him, six or seven feet down, was a floor of perfectly clean, shining white sand, rippled firm and hard by the tides. Two greyish shapes steered there, like long, rounded pieces of wood or slate. They were fish. He saw them nose towards each other, poise motionless, make a dart forward, swerve off, and come around again. It was like a water dance. A few inches above them, the water sparkled as if sequins were dropping through it. Fish again — myriads of minute fish, the length of his fingernail, were drifting through the water, and in a moment he could feel the innumerable tiny touches of them against his limbs. It was like swimming in flaked silver. The great rock the big boys had swum through rose sheer out of the white sand, black, tufted lightly with greenish weed. He could see no gap in it. He swam down to its base.

Again and again he rose, took a big chestful of air, and went down. Again and again he groped over the surface of the rock, feeling it, almost hugging it in the desperate need to find the entrance. And then, once, while he was clinging to the

black wall, his knees came up and he shot his feet out forward and they met no obstacle. He had found the hole.

He gained the surface, clambered about the stones that littered the barrier rock until he found a big one, and, with this in his arms, let himself down over the side of the rock. He dropped, with the weight, straight to the sandy floor. Clinging tight to the anchor of stone, he lay on his side and looked in under the dark shelf at the place where his feet had gone. He could see the hole. It was an irregular, dark gap, but he could not see deep into it. He let go of his anchor, clung with his hands to the edges of the hole, and tried to push himself in.

He got his head in, found his shoulders jammed, moved them in sidewise, and was inside as far as his waist. He could see nothing ahead. Something soft and clammy touched his mouth, he saw a dark frond moving against the greyish rock, and panic filled him. He thought of octopuses, of clinging weed. He pushed himself out backward and caught a glimpse, as he retreated, of a harmless tentacle of seaweed drifting in the mouth of the tunnel. But it was enough. He reached the sunlight, swam to shore, and lay on the diving rock. He looked down into the blue well of water. He knew he must find his way through that cave, or hole, or tunnel, and out the other side.

First, he thought, he must learn to control his breathing. He let himself down into the water with another big stone in his arms, so that he could lie effortlessly on the bottom of the sea. He counted. One, two, three. He counted steadily. He could hear the movement of blood in his chest. Fifty-one, fifty-two . . . His chest was hurting. He let go of the rock and went up into the air. He saw that the sun was low. He rushed to the villa and found his mother at her supper. She said only "Did you enjoy yourself?" and he said "Yes."

All night, the boy dreamed of the water-filled cave in the rock, and as soon as breakfast was over he went to the hay.

That night, his nose bled badly. For hours he had been underwater, learning to hold his breath, and now he felt weak and dizzy. His mother said, "I shouldn't overdo things, darling, if I were you."

That day and the next, Jerry exercised his lungs as if everything, the whole of his life, all that he would become, depended upon it. And again his nose bled at night, and his mother insisted on his coming with her the next day. It was a torment to him to waste a day of his careful self-training, but he stayed with her on that other beach, which now seemed a place for small children, a place where his mother might lie safe

in the sun. It was not his beach.

He did not ask for permission, on the following day, to go to his beach. He went, before his mother could consider the complicated rights and wrongs of the matter. A day's rest, he discovered, had improved his count by ten. The big boys had made the passage while he counted a hundred and sixty. He had been counting fast, in his fright. Probably now, if he tried, he could get through that long tunnel, but he was not going to try yet. A curious, most unchildlike persistence, a controlled impatience, made him wait. In the meantime, he lay underwater on the white sand, littered now by stones he had brought down from the upper air, and studied the entrance to the tunnel. He knew every jut and corner of it, as far as it was possible to see. It was as if he already felt its sharpness about his shoulders.

He sat by the clock in the villa, when his mother was not near, and checked his time. He was incredulous and then proud to find he could hold his breath without strain for two minutes. The words "two minutes", authorized by the clock, brought the adventure that was so necessary to him close.

In another four days, his mother said casually one morning, they must go home. On the day before they left, he would do it. He would do it if it killed him, he said defiantly to himself. But two days before they were to leave - a day of triumph when he increased his count by fifteen - his nose bled so badly that he turned dizzy and had to lie limply over the big rock like a bit of seaweed, watching the thick red blood flow on to the rock and trickle slowly down to the sea. He was frightened. Supposing he turned dizzy in the tunnel? Supposing he died there, trapped? Supposing — his head went around, in the hot sun, and he almost gave up. He thought he would return to the house and lie down, and next summer, perhaps, when he had another year's growth in him - then he would go through the hole.

But even after he had made the decision, or thought he had, he found himself sitting up on the rock and looking down into the water, and he knew that now, this moment when his nose had only just stopped bleeding, when his head was still sore and throbbing — this was the moment when he would try. If he did not do it now, he never would. He was trembling with fear that he would not go, and he was trembling with horror at that long, long tunnel under the rock, under the sea. Even in the open sunlight, the barrier rock seemed very wide and very heavy; tons of rock pressed down on where he would go. If he died there, he would lie until one day — perhaps not before next year — those big boys would swim into it and find it blocked.

He put on his goggles, fitted them tight, tested the vacuum. His hands were shaking. Then he chose the biggest stone he could carry and slipped over the edge of

the rock until half of him was in the cool, enclosing water and half in the hot sun. He looked up once at the empty sky, filled his lungs once, twice, and then sank fast to the bottom with the stone. He let it go and began to count. He took the edges of the hole in his hands and drew himself into it, wriggling his shoulders in sidewise as he remembered he must, kicking himself along with his feet.

Soon he was clear inside. He was in a small rock-bound hole filled with yellowish-grey water. The water was pushing him up against the roof. The roof was sharp and pained his back. He pulled himself along with his hands — fast, fast — and used his legs as levers. His head knocked against something; a sharp pain dizzied him. Fifty, fifty-one, fifty-two . . . He was without light, and the water seemed to press upon him with the weight of rock. Seventy-one, seventy-two . . . There was no strain on his lungs. He felt like an inflated balloon, his lungs were so light and easy, but his head was pulsing.

He was being continually pressed against the sharp roof, which felt slimy as well as sharp. Again he thought of octopuses, and wondered if the tunnel might be filled with weed that could tangle him. He gave himself a panicky, convulsive kick forward, ducked his head, and swam. His feet and hands moved freely, as if in open water. The hole must have widened out. He thought he must be swimming fast, and he was frightened of banging his head if the tunnel narrowed.

A hundred, a hundred and one. . . The water paled. Victory filled him. His lungs were beginning to hurt. A few more strokes and he would be out. He was counting wildly; he said a hundred and fifteen, and then, a long time later, a hundred and fifteen again. The water was a clear jewel-green all around him. Then he saw, above his head, a crack running up through the rock. Sunlight was falling through it, showing the clean dark rock of the tunnel, a single mussel shell, and darkness ahead.

He was at the end of what he could do. He looked up at the crack as if it were filled with air and not water, as if he could put his mouth to it to draw in air. A hundred and fifteen, he heard himself say inside his head — but he had said that long ago. He must go on into the blackness ahead, or he would drown. His head was swelling, his lungs cracking. A hundred and fifteen, a hundred and fifteen pounded through his head, and he feebly clutched at rocks in the dark, pulling himself forward, leaving the brief space of sunlit water behind. He felt he was dying. He was no longer quite conscious. He struggled on in the darkness between lapses into unconsciousness. An immense, swelling pain filled his head, and then the darkness cracked with an explosion of green light. His hands, groping forward, met nothing, and his feet, kicking back, propelled him out into the open sea.

He drifted to the surface, his face turned up to the air. He was gasping like a fish. He felt he would sink now and drown; he could not swim the few feet back to the rock. Then he was clutching it and pulling himself up on it. He lay face down, gasping. He could see nothing but a red-veined, clotted dark. His eyes must have burst, he thought; they were full of blood. He tore off his goggles and a gout of blood went into the sea. His nose was bleeding, and the blood had filled the goggles.

He scooped up handfuls of water from the cool, salty sea, to splash on his face, and did not know whether it was blood or salt water he tasted. After a time, his heart quieted, his eyes cleared, and he sat up. He could see the local boys diving and playing half a mile away. He did not want them. He wanted nothing but to get back home and lie down.

In a short while, Jerry swam to shore and climbed slowly up the path to the villa. He flung himself on his bed and slept, waking at the sound of feet on the path outside. His mother was coming back. He rushed to the bathroom, thinking she must not see his face with bloodstains, or tearstains, on it. He came out of the bathroom and met her as she walked into the villa, smiling, her eyes lighting up. "Have a nice morning?" she asked, laying her head on his warm brown shoulder a moment.

"Oh, yes, thank you," he said.

"You look a bit pale." And then, sharp and anxious. "How did you bang your head?"

"Oh, just banged it," he told her.

She looked at him closely. He was strained. His eyes were glazed-looking. She was worried. And then she said to herself, "Oh, don't fuss! Nothing can happen. He can swim like a fish."

They sat down to lunch together.

"Mummy," he said, "I can stay under water for two minutes — three minutes, at least."

It came bursting out of him.

"Can you, darling?" she said. "Well, I shouldn't overdo it. I don't think you ought to swim any more today."

She was ready for a battle of wills, but he gave in at once. It was no longer of the least importance to go to the bay.

# Humanities Summer Assignment, 2011

## PART TWO: “The Negro Speaks of Rivers”

“**The Negro Speaks of Rivers**” is a poem written by Langston Hughes. Hughes begins his poem with the phrase, “I’ve known rivers,” and he repeats this phrase two more times throughout the poem. We’d like you to tell us about water that you’ve known. For example, you may have “known” a lake, a beach, a sprinkler, a pool, or a rainstorm. Be creative—choose whatever experience you wish, as long as it involves water of some kind. Share a little piece of yourself with us! We want to get to know you through your creative and inventive work.

### Directions for completing the assignment:

1. Read the poem a few times.
2. Make sure to read it aloud to a *friend or family member* at least once. Share it. Talk about it. Enjoy it!
3. Respond to the poem by choosing one of the options below.

**CHOOSE ONE** (or a combination) of the following ways to respond to the poem:

- ❖ Create a **drawing** or **illustration** that shows us an experience that you’ve had with water.
  - Title the piece “I’ve Known \_\_\_\_\_.”
  - Your drawing should be no bigger than 8.5” x 11”.
  - Please feel free to use color—take time and care to make it vivid.

**OR**

- ❖ Write a **poem** about an experience that you’ve had with water.
  - Begin your poem with the phrase “I’ve Known \_\_\_\_\_.”
  - Your poem should be no longer than 1 page.
  - May be typed or neatly handwritten.

**OR**

- ❖ Write a short, **descriptive paragraph** that tells us about an experience that you’ve had with water.
  - Title the piece “I’ve Known \_\_\_\_\_.”
  - May be typed or neatly handwritten.

**This creative piece (Part 2) will be displayed for the first few weeks of school. Have fun and make it beautiful!**

# THE NEGRO SPEAKS OF RIVERS

**By Langston Hughes**

I've known rivers:

I've known rivers ancient as the world and older than the  
flow of human blood in human veins.

My soul has grown deep like the rivers.

I bathed in the Euphrates when dawns were young.

I built my hut near the Congo and it lulled me to sleep.

I looked upon the Nile and raised the pyramids above it.

I heard the singing of the Mississippi when Abe Lincoln  
went down to New Orleans, and I've seen its muddy  
bosom turn all golden in the sunset.

I've known rivers:

Ancient, dusky rivers.

My soul has grown deep like the rivers.