ARCHIMEDES

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"Eureka!", exclaimed Fred.

"What has Erika got to do with this?"

"No, EUUUreka. That is what Archimedes cried out sitting in his bath."

Skubba had always found Fred a bit special, but now he was convinced that his friend had completely lost it. "Who is Archithing?"

"Archimedes was a Greek scientist who had to find a way to tell his king if a crown was made out of gold."

"Do you need to be a scientist for that? If you melt the crown you can see that immediately."

"No, not this one. It had been a gift, so the crown could not be melted down."

"Aaah." Skubba sighed, wondering what that had to do with diving.

"When Archimedes got into his bath, he observed that some of the water had spilled over."

"I know that too!" Skubba exclaimed, "and if you jump in, then the water splashes against the walls."

Fred continued calmly, "Archimedes found that the weight of water spilt would be the same weight as the lump of gold of the crown. If not, the crown was a fake. Eureka. Found it!"

"Yeah, yeah. Let's dive," Skubba still did not understand the connection.

"No, wait and listen! If we know how heavy your bucket filled with water is, then we just have to make sure your empty bucket's weight is just as heavy.



Got it? Once we know that, you will be able to move underwater."

Although the whole thing made no sense to Skubba, the last words were like music to his ears. And he knew that when his strange friend promised something, it would happen.

Fred took the bucket from Skubba and quickly disappeared. Skubba was left there to wait.

A little later, Fred returned with the bucket which had now become very heavy.

"What have you been doing?"

"A full bucket weighs 5 kilograms. On the outside of the bucket I've attached 5 kilograms of lead I found in your father's garage. That is why the bucket is so heavy. Go back into the water and stick your head in the bucket like you normally do."

Skubba thought, 'put 5 kilograms on my head? Fred can barely carry it and I need to go diving with that?' Skubba had his doubts, but the urge to dive like a real diver was just too great to miss. He decided to do what his friend had asked him to do.

While Fred was pumping air, he stuck his head into the bucket. He noticed that once in the water the bucket was not that heavy after all. He even had to pull on it a bit to get underwater completely.

He held it firmly and took a step forward. He could now easily walk. Hey, that worked without tripping. Nice!

"I can move!" he yelled surprised. But the water around the bucket muffled the sound. Fred did not respond to his cry and carried on quietly pumping air in.