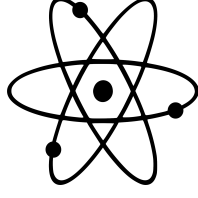


Petrov Day Ceremony



Notes

¹**Greek:** Aeschylus, *Prometheus Bound* 109–113. [Link](#)
English: Cookson, G.M., trans. (1922). *Four Plays of Aeschylus* (p. 167). Holywell Press. [Link](#)

²**Greek:** Plato, *Laws* 3.677a. [Link](#)
English: Plato. 1875. *Laws*. Translated by B. Jowett. [Link](#)
Date: Adams, J.P. (2008, May 28). *Platonic Chronology and Writings*. [Link](#)

³Budge, E.A. Wallis. (1929). *The Rosetta Stone in the British Museum* (pp. 75, 123, 168–9). The Religious Tract Society.

⁴**Latin:** Bridges, Henry, ed. (1898). *The ‘Opus Majus’ of Roger Bacon* (vol. 2, p. 168). Clarendon Press. [Link](#)
English: Burke, Robert Belle, trans. (1962). *The Opus Majus of Roger Bacon* (vol. 2, p. 584). Russell & Russell Inc. [Link](#)

⁵Poundstone, W. (1993). *Prisoner’s Dilemma: John von Neumann, Game Theory, and the Puzzle of the Bomb* (p. 4). Anchor Books.

⁶Васильев, Юрий. (2004, April 27). Тот, который не нажал. *Московские Новости*. [Link](#)

⁷Lebedev, Anastasiya. (2004, May 21). The man who saved the world finally recognized. *MosNews*. [Link](#)

Set up a table in the middle of the room and gather everyone around.

Place on the table:

- a candelabrum with eight slots,
- seven unlit candles in a tray (but not in the candelabrum), and
- a lighter or matches (and if the latter, a cup of sand or water in which to douse them).

Take an eighth candle and insert it into a candle-holder so that it can be moved around without dripping wax. Have a printed copy of this booklet ready.

Fill in the blank on page 3 beforehand with the number of years since 1983.

The ceremony should begin after dark. Start with the lights on or dimmed, but designate someone to turn them off once the first candle is lit.

The speech should be given extemporaneously, but make sure to cover all the bullet points.

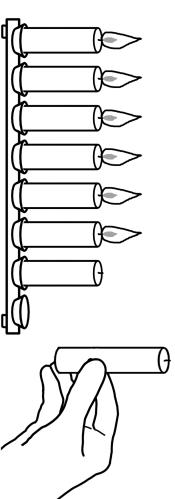
Welcome to the Petrov Day ceremony. Here's how it works:

- We will pass around the booklet, taking turns reading from it by candlelight.
- Read regular text aloud; perform italicized actions.
- Speak loudly and clearly; don't fret over pronunciation.
- Read attributions for quotes.
- At the triangle symbol (▲), come up to the table and perform the action.
- At horizontal lines, pass the booklet and candle.
- Silence your phones.

Are there any questions? *Pause for questions*

Let us begin.

▲ *Take the last, unlit candle from the candelabrum.*

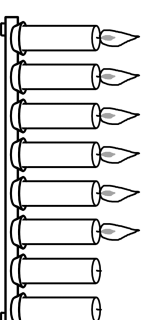


Tonight we gather in perilous times. May we one day be free from all fear, and free for all things to come.

So say we one, so say we all.—

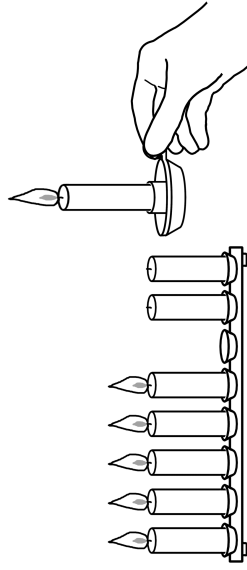
Raise the candle high.

(All): —So say we all.



Return the candle to its slot. Turn on the lights and then put out the candles. This concludes the ceremony.

▲ Take the sixth candle from the candelabrum and place it in the holder.



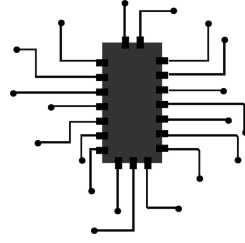
With computing, our words fly far indeed. We behold the fullness of our gathered knowledge, and have tools from across the world all at our beck and call.

That the power of our minds is multiplied—

Raise the candle high.

(*All*): —we will remember.

Return the candle to its slot.



This day, September 26, is Petrov Day.

— years ago today, the story of humanity nearly ended. We gather here to remember that moment, and others like it.

That not a worm is cloven in vain;
That not a moth with vain desire
Is shriveled in a fruitless fire,
Or but subserves another's gain.

Behold, we know not anything;
I can but trust that good shall fall
At last—far off—at last, to all,
And every winter change to spring.

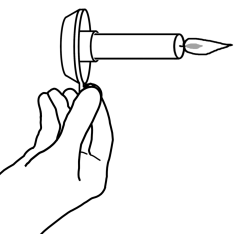
So runs my dream: but what am I?
An infant crying in the night:
An infant crying for the light:
And with no language but a cry.

— Alfred Lord Tennyson,
In Memoriam A.H.H. (1850)

▲ *Light the candle in the candle-holder with a match or lighter and hold it high, saying:*

The first candle, for fire.

Remove the lighter/matches from the table.

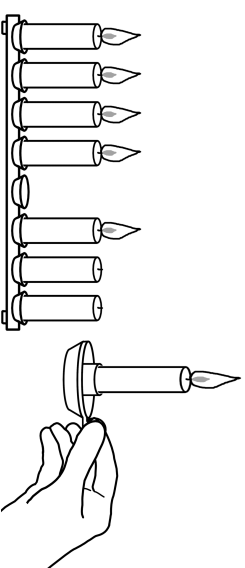


Ναρθηκοπήρωτον δὲ θηρώμαι πῦρ
Πηγὴν κλοπαίαν, ἣ διδάσκαλος τέχνης
Πιάσῃς βροτοῖς πέφνηε καὶ μέγας πόρος.
Τοῦνδε ποινὰς ἀμυλιακῆταιον τίτω
Υπαίθριος δεσμοῖς πεπασσάλευμενος.

I sought the fount of fire in hollow reed
Hid privily, a measureless resource
For man, and mighty teacher of all arts.
This is the crime that I must expiate
Hung here in chains, nailed 'neath the open sky.

—Prometheus Bound (circa 450 BC)¹

▲ *Take the fifth candle from the candelabrum and place it in the holder:*



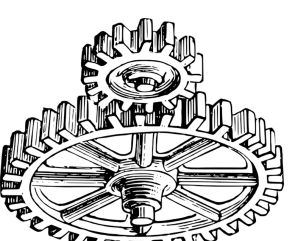
With industry, the burden of survival is lightened. More so than ever before, we need no longer toil in the fields for our daily meal and nightly rest.

That we can turn our labors to other, greater things—

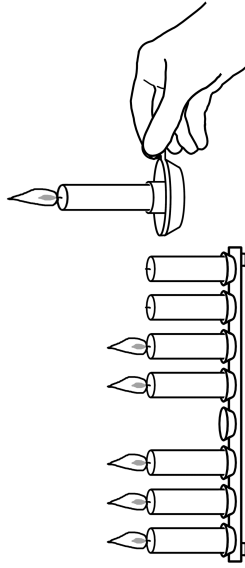
Raise the candle high.

(All): —we will remember.

Return the candle to its slot.



▲ Take the fourth candle from the candelabrum and place it in the holder.



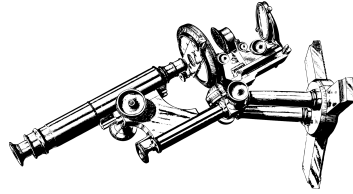
With science, we broach the true nature of the world. We understand the laws that set forth the outcomes of what we do.

That we can forecast the future, and work to steer its course—

Raise the candle high.

(All): —we will remember.

Return the candle to its slot.



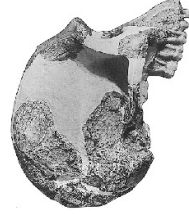
Homo ergaster



Homo erectus



Homo floresiensis



Homo habilis



Homo heidelbergensis



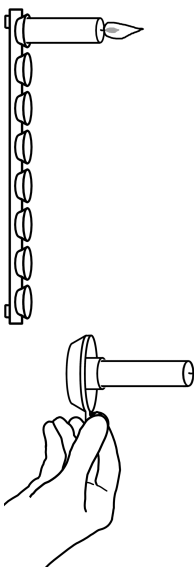
Homo neanderthalensis



Homo rudolfensis

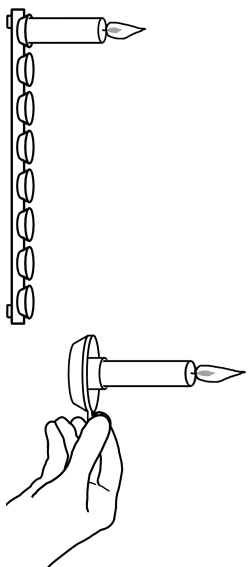
▲ Remove the lit candle from the holder and place it in the first slot of the candelabrum.

Place an unlit candle in the holder.

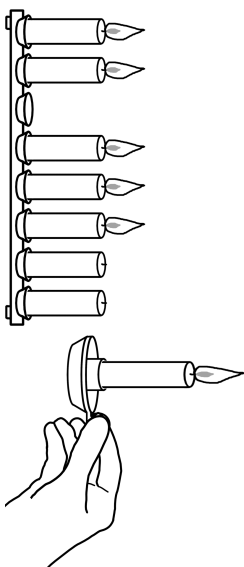


Light this candle from the one in the candelabrum and hold it high, saying:

The second candle, for language.



▲ Take the third candle from the candelabrum and place it in the holder.



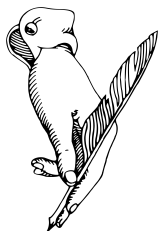
With writing, we take on the wisdom of those who came before. We stand on the shoulders of giants, and see farther than they did, though we may not be giants ourselves.

That we have a wealth of knowledge upon which to build—

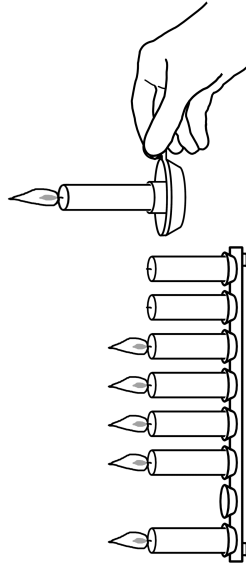
Raise the candle high.

(All): —we will remember.

Return the candle to its slot.



▲ *Take the second candle from the candelabrum and place it in the holder.*



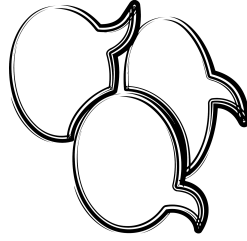
With speech, our minds grow beyond us and between us. We can share our thoughts and feelings, and come to know those of others.

That we can learn and teach—

Raise the candle high.

(All): —we will remember.

Return the candle to its slot.

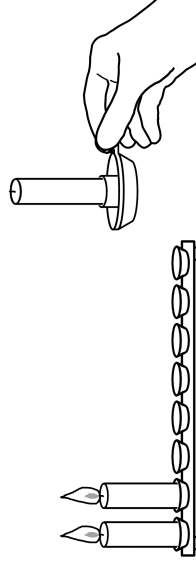


“It certainly is not a true instinct, for every language has to be learnt. It differs, however, widely from all ordinary arts, for man has an instinctive tendency to speak, as we see in the babble of our young children; whilst no child has an instinctive tendency to brew, bake, or write.”

— Charles Darwin, Descent of Man (1871)

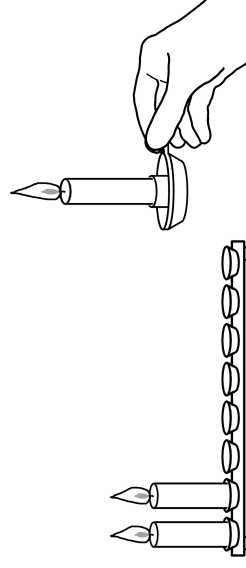
▲ *Remove the lit candle from the holder and place it in the second slot of the candelabrum.*

Place an unlit candle in the holder.



Light this candle from the one in the second slot of the candelabrum and hold it high, saying:

The third candle, for farming.

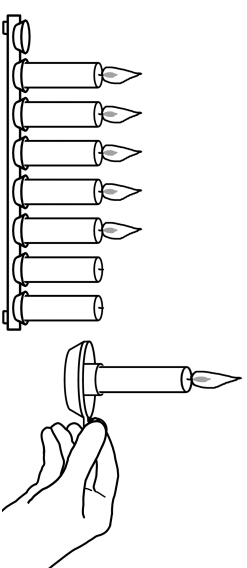


“ἀπ’ οὖν ὑμῖν οἱ παλαιοὶ λόγοι ἀήθεϊαν ἔχειν
τινὰ δοκοῦσιν; [...] τὸ πολλὰς ἀνθρώπων φθορὰς
γεγονέναι κατακλυσμοῖς τε καὶ νόσοις καὶ ἄλλοις
πολλοῖς, ἐν οἷς βραχὺ τι τῶν ἀνθρώπων λείπεσθαι
γένος. — πάνυ μὲν οὖν πιθανὸν τὸ τοιοῦτον πάν
παντί. — φέρε δὴ, νοήσωμεν μίαν τῶν πολλῶν ταύτην
τὴν τῷ κατακλυσμῷ ποτε γενομένην.

Do you believe that there is any truth in ancient tra-
ditions [...] about the many destructions of mankind
which have been occasioned by deluges and pesti-
lences, and in many other ways, and of the survival of a
remnant? — Everyone is disposed to believe them. —
Let us consider one of them, that which was caused by
the famous deluge.”

— Plato, Laws (circa 350 BC)²

▲ Take the first candle from the candelabrum and place it in the holder.



With fire, we drive away the darkness. We are freed from fear of the
beasts of the night, and can spare a thought for the times ahead.

That we can make light, even in the darkest hours—

Raise the candle high.

(All): —we will remember.

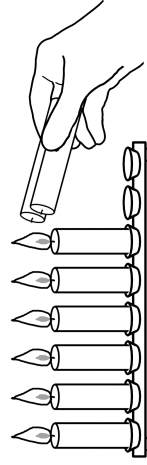
Return the candle to its slot.



▲ Remove the lit candle from the holder and place it in the sixth slot of the candelabrum.

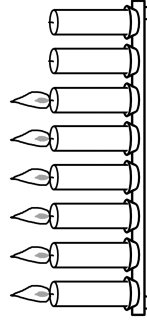
Lay the booklet flat on the table.

Take the two unlit candles from the candelabrum. Without lighting either, hold them near the flame of the candle in the sixth slot of the candelabrum, saying:



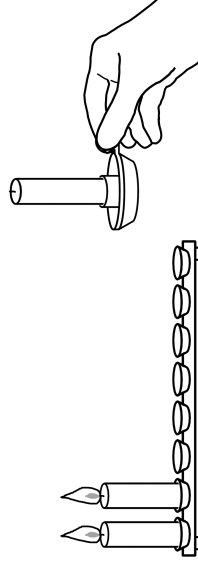
Which brings us at last to the present day, as we approach the climax of our history, where we will either destroy ourselves, or spread through the stars.

Return the unlit candles to the candelabrum, take the booklet back to your seat, and pass it along.



After each of the six invocations, when the candle is raised, say together “We will remember.” After the seventh, repeat “So say we all.”

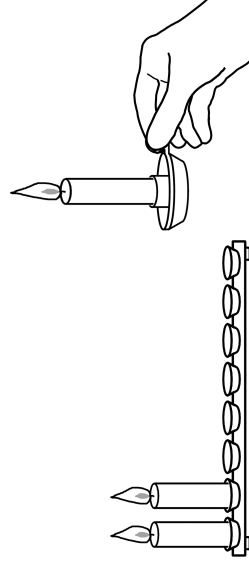
▲ Extinguish the candle in the holder.



Humanity lived in a delicate balance of knowledge gained and forgotten, relying solely on memory and oral traditions. With the advent of writing, the preservation of knowledge expanded, and the equilibrium between learning and forgetting was broken.

Light the candle in the holder again from the one in the second slot of the candelabrum, and hold it high, saying:

The third candle again, for writing.





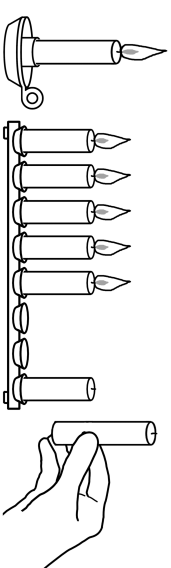
[...]*ΤΕΡΕΟΥ ΑΙΘΟΥ ΤΟΙΣ ΤΕ ΙΕΡΟΙΣ ΚΑΙ ΕΙΧΟΡΟΙΣ ΚΑΙ ΕΛΛΗΝΙΚΟΙΣ ΤΡΑΜΜΑΣΙΝ ΚΑΙ ΣΤΗΣΑΙ ΕΝ ΕΚΑΣΤΩ ΤΩΝ ΤΕ ΠΡΩΤΩΝ ΚΑΙ ΔΕΥΤΕΡΩ*[...]

This decree [shall be inscribed] on a tablet of hard stone in hieroglyphic, demotic, and Greek writing and set up in the sanctuaries in each of the aforementioned temples of the first, second, and third rank beside the image of the King Ptolemy, ever-living, beloved of Ptah, the god manifest, lord of good deeds.”

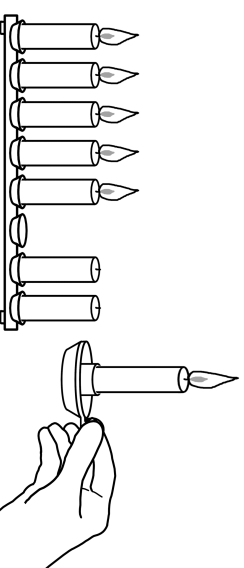
— Rosetta Stone (circa 196 BC)³

▲ *Set the candle-holder down on the table. Take an unlit candle and hold it high, saying:*

Another seventh candle, for an empty future.



Place the candle, still unlit, in the second-to-last slot of the candle-labrum. Take the candle-holder with the lit candle back to your seat, and pass it and the booklet along.



On September 7, 2017, a friend of Stanislav Petrov called him on the phone to wish him a happy birthday, only to learn that he had died several months prior, in May of that year.

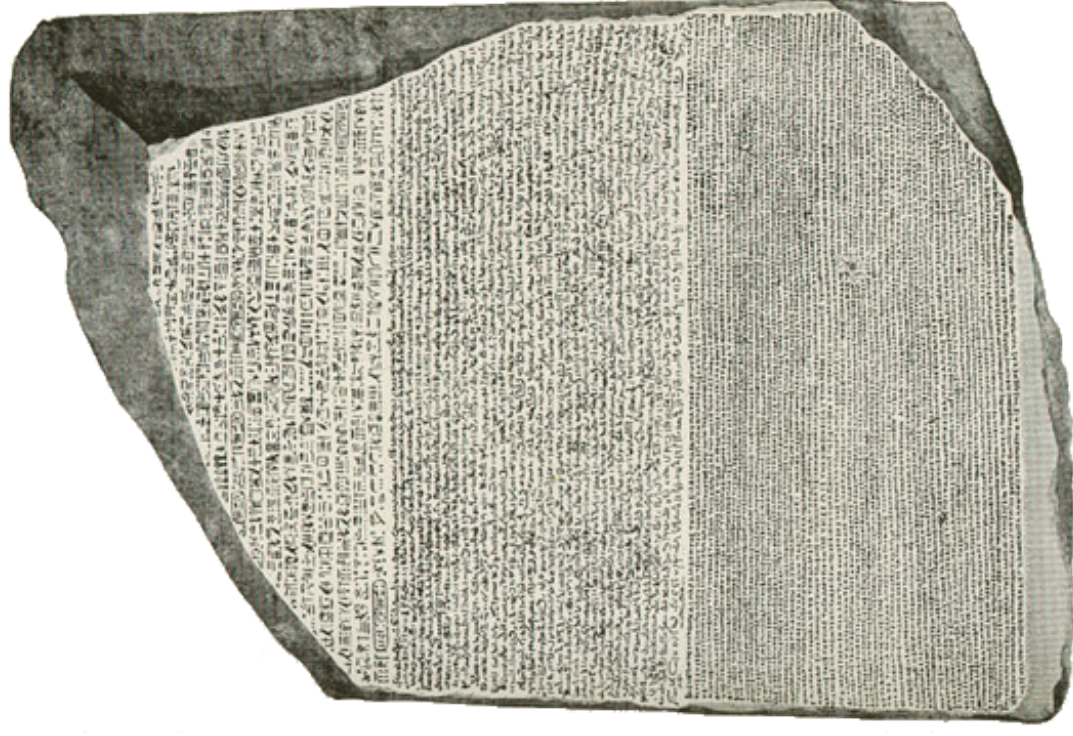
At the time, he received no award. The incident embarrassed his superiors and the scientists responsible for the system, so if he had been rewarded, they would have had to be punished. (He received the International Peace Prize thirty years later, in 2013).

Things eventually calmed down. The Soviet Union dissolved. Safe-guards were put on most bombs, to prevent accidental or unauthorized detonation.

But not every threat to humanity is as easy to understand as nuclear weapons.

“The AI does not hate you, nor does it love you, but you are made out of atoms which it can use for something else. The AI runs on a different timescale than you do; by the time your neurons finish thinking the words ‘I should do something’ you have already lost.”

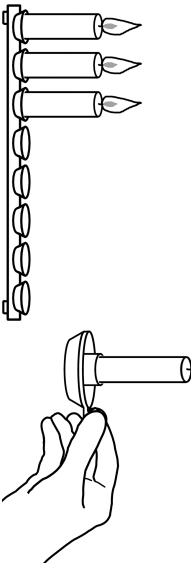
— Eliezer Yudkowsky, Artificial Intelligence as a Positive and Negative Factor in Global Risk (2006)



While much writing took the form of legal codes, genealogies, and other everyday matters, some of it advanced our knowledge of the world—and more importantly, our method for finding it.

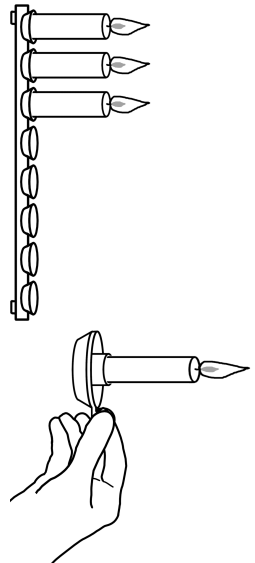
▲ Remove the lit candle from the holder and place it in the third slot of the candelabrum.

Place an unlit candle in the holder.



Light this candle by touching it in turn to the three lit candles, and hold it high, saying:

The fourth candle, for science.



The procedure was clear: report up the chain of command that the Americans had launched missiles. This could have set off a nuclear war.

If the launch was real, failing to report it promptly could mean losing a nuclear war.

What would you have done?

“I imagined if I’d assume the responsibility for unleashing the third World War—and I said, no, I wouldn’t. [...] I always thought of it. Whenever I came on duty, I always refreshed it in my memory.”

—Stanislav Petrov⁷

Instead of telling his superiors what the system was saying, Petrov told them it was a false alarm—despite not really knowing this was the case.

“Сирена на КП воею ревет, красные буквы
полюхают. Шок, конечно, колоссальный. [...] Все
повскакивали из-за пультов, на меня смотрят.
А я что? Все по инструкции для оперативных
дежурных, которую сам и написал. Сделали
все, что нужно. Проверили функционирование
всех систем. Трещать уровнем проверки, один
за другим. Идут доклады: все совпадает,
вероятность—двойка. [...] Это высшая[.]

An alarm at the command and control post went off
with red letters blinking on the terminal. It was a nasty
shock. [...] Everyone jumped from their seats, looking
at me. What could I do? There was an operations pro-
cedure that I had written myself. We did what we had
to do. We checked the operation of all systems—on 30
levels, one after another. Reports kept coming in: All
is correct; the probability factor is two. [...] The high-
est.”

— Stanislav Petrov⁶



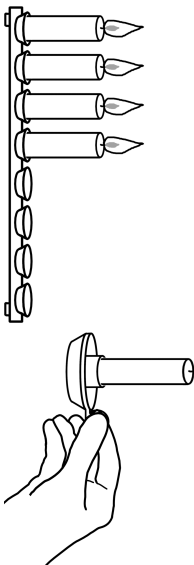
*“Qui ergo vult sine demonstratione gaudere de
veritatibus rerum, oportet quod experientiae sciat
vacare; et hoc patet ex exemplis. Nam multa scribunt
auctores, et vulgus tenet per argumenta quae fingit
sine experientia, quae sunt omnino falsa.*

He therefore who wishes to rejoice without doubt in
regard to the truths underlying phenomena must know
how to devote himself to experiment. For authors write
many statements, and people believe them through rea-
soning which they formulate without experience. Their
reasoning is wholly false.”

— Roger Bacon, *Opus Majus* (1266)⁴

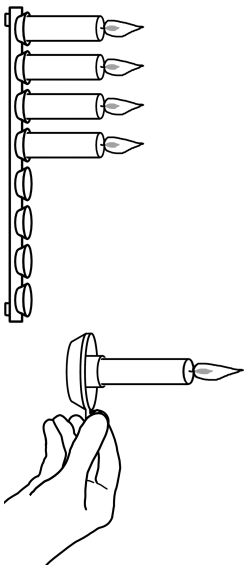
▲ *Remove the lit candle from the holder and place it in the fourth slot of the candelabrum.*

Place an unlit candle in the holder.



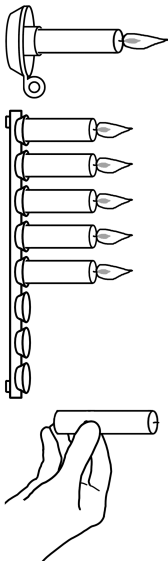
Light this candle from the one in the fourth slot of the candelabrum and hold it high, saying:

The fifth candle, for industry.

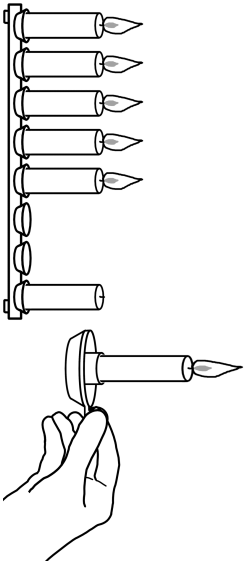


▲ *Set the candle-holder down on the table. Take an unlit candle and hold it high, saying:*

The seventh candle, for a flourishing future.



Place the candle, still unlit, in the last slot of the candelabrum. Take the candle-holder with the lit candle back to your seat, and pass it and the booklet along.



On September 26, 1983, Stanislav Petrov was the duty officer at the Oko nuclear early warning system.

“Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever.

Since the design of machines is one of these intellectual activities, an ultra-intelligent machine could design even better machines; there would then unquestionably be an ‘intelligence explosion,’ and the intelligence of man would be left far behind.

Thus the first ultraintelligent machine is the last invention that man need ever make, provided that the machine is docile enough to tell us how to keep it under control.”

— I.J. Good, *Speculations Concerning the First Ultraintelligent Machine* (1963)

“[...] it may become possible to set up a nuclear chain reaction in a large mass of uranium, by which vast amounts of power and large quantities of new radium-like elements would be generated. [...]

This new phenomenon would also lead to the construction of bombs, and it is conceivable—though much less certain—that extremely powerful bombs of a new type may thus be constructed.”

— Einstein/Szilard Letter (August 2, 1939)

“If you say why not bomb them tomorrow, I say why not today? If you say today at 5 o’clock, I say why not one o’clock?”

— John von Neumann (1950)⁵

Meanwhile, the rockets that had first been developed for war were turned to exploration as well:

“ Here men from the planet Earth first set foot upon the Moon

July 1969, A.D.

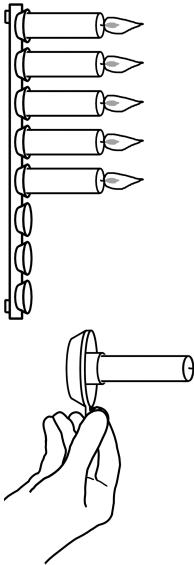
We came in peace for all mankind”

— Plaque left on the Moon by Apollo 11 astronauts



▲ Remove the lit candle from the holder and place it in the fifth slot of the candelabrum.

Place an unlit candle in the holder.



Light this candle from the one in the fifth slot of the candelabrum and hold it high, saying:

The sixth candle, for computing.

