

SYSTEMS THINKING RESOURCES — GRADE 3

The Lion King

1994 | Directed by Roger Allers and Rob Minkoff | Runtime: 88 minutes | Rated: G

Systems Thinking Concept: Energy Cycles**Primary DGO:** DGO 1 — Build Self-Responsibility**Supporting DGOs:** DGO 3 (Move Away from Victim Mindset) · DGO 6 (Begin to Contribute to Society)**Where to Watch:** Disney+

Content Heads-Up

The Lion King is rated G and runs 88 minutes. It is one of the most beloved animated films ever made and entirely appropriate for Grade 3 students. Most 8-9 year olds will have seen it before; watching it again with the energy cycle lens will reveal dimensions of the film's story they have not previously noticed.

Mufasa's death: the film's central emotional event — Mufasa's death in the wildebeest stampede — is one of the most affecting moments in children's cinema. It is not graphic, but it is real and it is sad, and children who have seen the film before will brace for it. Parents should be present for this sequence. The lesson's energy cycle context actually enriches what this moment means: Mufasa's body returns to the earth, feeds the grass, and the grass feeds the animals. His death is not only a loss — it is the cycle continuing. This does not diminish the grief, but it deepens the understanding of what the Circle of Life means.

Scar and the hyenas: Scar is the film's villain and the agent of the energy cycle's disruption. He is menacing but not horrifying — a classic animated antagonist operating within the emotional range of the film's G rating. The hyenas are treated as comic relief as much as threat. Some younger or more sensitive children may find Scar's more intense moments uncomfortable; these pass quickly.

Themes of grief and exile: the film deals honestly with loss, guilt, and the impulse to run from responsibility. Simba believes he caused his father's death and carries that guilt through years of exile. These are genuine emotional themes that children this age can engage with meaningfully. Be ready for questions about death, guilt, and what it means to go home when you have done something wrong.

The 1994 original versus the 2019 remake: this guide is written for the 1994 animated film, which is the version most families will know and which has the specific visual and musical qualities — particularly the Circle of Life opening — that make the energy cycle lesson most vivid. The 2019 photorealistic version covers the same story and is also appropriate, but the original's more stylised presentation of the Pride Lands makes the contrast between the healthy cycle and the broken cycle more emotionally immediate.

Why This Film for Energy Cycles

Your child's Systems Thinking lesson on energy cycles taught them that energy flows through living systems in a continuous cycle. The sun provides the primary energy input. Plants capture that energy through photosynthesis, converting sunlight into the biological material that makes up their leaves, stems, and seeds. Herbivores eat the plants, transferring the captured solar energy into their own bodies. Carnivores eat the herbivores, transferring the energy again. Decomposers — bacteria, fungi, insects — break down dead organisms at every level of the cycle, releasing the stored energy back into the soil as nutrients that plants use to grow. The cycle has no true beginning or end: every organism that dies feeds the system that produced it.

The *Lion King* opens with this cycle stated as music and image. The Circle of Life sequence — the sun rising over the Pride Lands, the herds gathering at Pride Rock, Simba presented to the assembled animals — is not a political ceremony. It is an energy cycle visualised. Every animal present is a node in the network through which the sun's energy flows: from the savanna grass to the zebra to the lion, and from every dead body back into the soil that feeds the grass. Mufasa's first lesson to young Simba in the film — 'Everything you see exists together in a delicate balance. As king, you need to understand that balance and respect all the creatures' — is the energy cycle lesson stated as a king's responsibility.

The Pride Lands under Mufasa are the energy cycle in its healthy, balanced state. The herds graze the grass without overgrazing it. The lions hunt the herds without depleting them. The grass grows in the soil enriched by decomposition. The rain falls, the river runs, the soil stays fertile. Every element in the cycle is present and fulfilling its role. The system manages itself — not because anyone is controlling it but because every organism is doing what its nature requires it to do, and what its nature requires serves the cycle that sustains it. This is the energy cycle's most important and most counterintuitive quality: when it is running well, it does not need management. It needs only the right conditions and the right organisms doing their natural part.

Mufasa explains the cycle to Simba at the watering hole with a specific and important precision: 'When we die, our bodies become the grass, and the antelope eat the grass. And so we are all connected in the great Circle of Life.' He is describing the decomposer level of the energy cycle — the mechanism by which the energy locked in a dead organism is released back into the system. This is the cycle's most important and least visible step. Without decomposition, energy would be locked in dead matter and the cycle would stop. The lion's death is as essential to the cycle as the lion's life. Every organism's death is a contribution to the system that produced it.

Scar's takeover breaks the energy cycle at its most critical point: the predator-prey relationship. Lions are apex predators in the Pride Lands' energy cycle. Their role is to cull the herds — to remove the weakest, oldest, and most vulnerable individuals, keeping the herd populations healthy and preventing any species from overgrazing the land. Under Mufasa, the lions hunt and the herds are kept in balance. Under Scar, the hyenas — who are scavengers and opportunistic predators rather than apex hunters — are given control of the Pride Lands. The hyenas do not hunt like lions. They consume indiscriminately, overgrazing the food supply, depleting the herds, and driving the animals from the land. The grasslands turn brown. The rivers dry up. The soil loses its fertility. The energy cycle has been broken at the predator level, and the disruption cascades down through every other level of the system.

Simba's absence is the cycle's most personal break. He is not just a king who went away — he is the specific organism whose role in the cycle is to restore the predator-prey balance and protect

the conditions under which the cycle can run. The energy cycle lesson does not typically include a human (or lion) role in the cycle. But *The Lion King* adds a specific insight: in complex ecosystems, certain organisms play roles that maintain the conditions for the cycle to run. When those organisms are absent, the cycle breaks even if no single organism is consuming too much. Simba's responsibility is not just to rule — it is to be present in the system that needs him to function.

Simba's return is the cycle's restoration. The rain that falls after he reclaims Pride Rock is not a metaphor — it is the system responding to the restoration of its missing element. With Scar and the hyenas gone and the lions back in their role, the predator-prey balance can restore itself. The herds will return to the grasses. The grasses will grow in the soil that the herds' presence fertilises. The decomposers will return as the ecosystem recovers its biological richness. The cycle that was broken will begin to run again — slowly at first, then with increasing momentum as each restored element feeds the restoration of the next. The final image of Simba's son being presented at Pride Rock is the cycle completing and restarting: the next generation entering a system that has been restored for them.

DGO 1 — Build Self-Responsibility — is the primary DGO because the energy cycle lesson's most important human implication is that every person who is part of a system has a responsibility to that system's health. Simba was born into a role in the Pride Lands' energy cycle — not as a metaphysical predestination but as the specific, practical fact that the cycle needed a lion who would hunt the right way, protect the land, and maintain the conditions for balance. His running away was the abdication of that responsibility. His return was its acceptance. The lesson for Grade 3 students is not mythic: they are already part of multiple energy cycles — their household, their classroom, their local ecosystem — and their actions are already feeding back into those cycles. Building self-responsibility means recognising this, and choosing to act in ways that support the cycles they are part of rather than breaking them.

DGO 3 — Move Away from Victim Mindset — is Simba's dominant frame during his years with Timon and Pumbaa. *Hakuna Matata* is not merely a song about not worrying — it is a philosophical system for avoiding responsibility by reframing one's circumstances as fixed and one's choices as irrelevant. Simba accepts this frame because it relieves him of the guilt he carries about Mufasa's death. But the victim frame has a cost: it keeps him absent from the system that needs him, and the system continues to degrade while he eats grubs in the jungle. The move away from victim mindset is not Simba deciding to stop being sad. It is Simba deciding that his presence in the cycle matters more than his comfort outside it.

DGO 6 — Begin to Contribute to Society — is Simba's return, stated as the energy cycle's restoration logic. His contribution to the Pride Lands is not just political — it is ecological. By returning and restoring the predator-prey balance, he initiates the energy cycle's restoration. The cycle will not be fully restored by Simba alone; it will be restored by the whole system's response to his restoration of its missing element. One lion, in the right role, at the right time, initiates a cascade of ecological restoration that no amount of effort from any other position in the cycle could have produced. This is DGO 6 at its most systemic: your contribution to the right role in the right system, at the right moment, can initiate effects far larger than the contribution itself.

The Pride Lands Energy Cycle: Seven Steps From Sun to Soil and Back

The Pride Lands' energy cycle runs through every organism in the film. This table maps seven steps of the cycle — from the sun to each level of the food chain and back to the soil — showing the organism, the energy source, the transfer, what the cycle looks like under Mufasa (healthy), what it looks like under Scar (broken), and the lesson each step carries.

Step	Organism	Energy Source	Energy Transfer	Under Mufasa	Under Scar	The Lesson
1	The sun	<i>Nuclear fusion in the sun's core produces electromagnetic radiation — light and heat — that travels to Earth.</i>	Solar energy reaches the savanna as light, warming the soil and providing the photosynthetic energy that all life in the system ultimately depends on.	The sun rises over Pride Rock in the Circle of Life opening — the visible, glorious source of all the energy that flows through every organism in the Pride Lands.	The sun continues to shine even during Scar's reign. The energy source does not change. What changes is whether the system's other elements are in place to capture and cycle it.	The sun is the primary energy input for all life on Earth. Every organism in every food chain ultimately depends on solar energy. When the cycle breaks, it is never because the sun stops shining — it is because the organisms that capture and transfer the energy are disrupted.
2	Savanna grasses and plants	<i>Solar energy, captured through photosynthesis</i>	Plants convert solar energy into biomass —	Under Mufasa, the grasses are lush, green, and	Under Scar, the grasses are overgrazed by the	Plants are the cycle's energy capture

		<p><i>sis. Carbon dioxide from the air, water from the soil, and sunlight combine to produce glucose — biological energy stored in plant material.</i></p>	<p>stems, leaves, seeds, roots — that herbivores can eat. The energy is now stored in biological form, available to the next level of the cycle.</p>	<p>abundant. The herds graze without overgrazing because their populations are kept in balance by the lions' hunting. The grass always has time to regrow.</p>	<p>hyenas' indiscriminate consumption. Without recovery time, the grasslands turn brown and die. The plant level of the cycle collapses, taking every level above it down with it.</p>	<p>layer. Without them, no energy from the sun reaches any animal. Overgrazing — consuming plants faster than they can regrow — breaks the cycle at its most fundamental level. Every higher-level disruption in the Pride Lands traces back to this.</p>
3	<p>Herbivores — wildebeest, zebra, antelope</p>	<p><i>Plant biomass. Herbivores eat grasses, leaves, and seeds, digesting the stored solar energy into the nutrients and energy their own bodies need.</i></p>	<p>Herbivore bodies store the energy captured from plants. When carnivores eat herbivores, they access the solar energy that the plants captured and the herbivores stored. The energy</p>	<p>Under Mufasa, the herds are vast and healthy. The opening Circle of Life sequence shows the herds gathered at Pride Rock — their sheer abundance is evidence</p>	<p>Under Scar, the herds thin and eventually leave the Pride Lands entirely. With overgrazed grasses unable to sustain them, they seek other lands. The herbivore level of the</p>	<p>Herbivores are the cycle's first energy transfer layer. They also play a role in maintaining the plant layer — their movement</p>

			<p>moves up the chain.</p>	<p>of a plant layer that can sustain them. The wildebeest stampede is possible only because the herd is enormous.</p>	<p>cycle empties, removing the energy source for the carnivores.</p>	<p>aerates the soil, their waste fertilises it, and their selective grazing can actually stimulate plant growth when populations are in balance.</p>
<p>4</p>	<p>Carnivores — lions</p>	<p><i>Herbivore biomass. Lions hunt and eat the herds, accessing the concentrated solar energy stored in herbivore bodies.</i></p>	<p>Lions transfer energy upward in the chain by consuming herbivores. They also regulate the herbivore population, preventing overgrazing and keeping the herd populations healthy by culling the weakest individuals.</p>	<p>Mufasa's pride hunts the herds in the natural balance that keeps every level of the cycle functional. The lions take what they need and no more. Their hunting is not a disruption of the cycle — it is a part of it.</p>	<p>Scar does not hunt like Mufasa. He is an ineffective predator who relies on the hyenas rather than the lions' natural hunting behaviour. The apex predator role in the cycle is unfilled, and the consequences ripple downward through every other level.</p>	<p>Apex predators are the cycle's population regulators. Their absence from an ecosystem — what ecologists call a trophic cascade — disrupts every level below them. The Yellowstone wolf reintroduction is a real-world example: wolves returne</p>

						<p>d to Yellows tone and changed the behavior of elk, which changed the vegetation, which changed the rivers. Mufasa's lions play the same role in the Pride Lands.</p>
5	<p>Scavengers — hyenas</p>	<p><i>Carrion — the bodies of animals that have died from hunting, age, or disease. Scavengers play a different role from apex predators: they clean up what is left behind, preventing disease and returning energy to the cycle.</i></p>	<p>Scavengers transfer energy that would otherwise remain locked in dead bodies back into the living system. By consuming carrion, they make the energy available to decomposers and eventually back to the soil.</p>	<p>Under Mufasa, the hyenas live in the Elephant Graveyard — outside the Pride Lands' primary cycle. They access the cycle's energy at the margins, playing their natural scavenger role without destabilizing the predator-prey balance.</p>	<p>Under Scar, the hyenas are placed in the apex predator role they were not designed to fill. They consume indiscriminately, depleting the herds faster than natural predation would, and the Pride Lands' cycle collapses under their mismanagement.</p>	<p>Every organism's role in the energy cycle matters. When an organism is placed in a role it was not adapted to fill — when a scavenger is asked to perform an apex predator's function — the cycle breaks. The right</p>

						<p>organism in the right role is as important as the presence of all organisms.</p>
6	<p>Decomposers — bacteria, fungi, insects</p>	<p><i>Dead organic matter at every level of the cycle — dead plants, dead herbivores, dead carnivores, dead scavengers. Decomposers break down all biological material into its chemical components .</i></p>	<p>Decomposers release the energy and nutrients locked in dead organisms back into the soil as minerals and organic compounds. These nutrients are then absorbed by plant roots, re-entering the cycle at the plant level. Without decomposers, dead matter would accumulate and nutrients would never return to the soil.</p>	<p>The Pride Lands' soil is rich and fertile under Mufasa because the decomposer layer has been running continuously — breaking down dead organisms, enriching the soil, supporting the plant growth that feeds the herds. This layer is invisible in the film but fundamental to everything visible.</p>	<p>Under Scar, the decomposer layer cannot keep pace with the scale of death and depletion. The soil loses its fertility as the cycle slows. Without the plants it cannot support, without the herds it cannot replenish, the decomposer layer has less to work with — and the cycle's slowdown compounds.</p>	<p>Decomposers are the cycle's most essential and least visible participants. Mufasa's line — 'When we die, our bodies become the grass' — describes the decomposer process. Every organism's death is a contribution to the cycle. The decomposer layer is what makes that contribution possible .</p>

7	<p>The cycle completes — and begins again</p>	<p><i>Nutrient-rich soil, produced by decomposition, absorbs rainfall and solar energy, supporting the next generation of plant growth.</i></p>	<p>Plants grow from the enriched soil, capturing solar energy and making it available to the next generation of herbivores. The cycle returns to step 2. It has no end — only continuous transformation of energy from one form to another.</p>	<p>The final image of the film — Simba's cub presented at a restored Pride Rock, the herds gathered below, the rains returning — is the cycle restarting. The green grasslands are visible. The herds are back. The energy cycle is running again.</p>	<p>The dry, barren Pride Lands under Scar represent the cycle arrested: the energy still arrives from the sun, but there is nothing left to capture it, transfer it, or return it to the soil. The land is not dead — it is waiting for the cycle to be restarted.</p>	<p>The energy cycle is not fragile — it is resilient . Once the conditions for the cycle are restored, it restarts and amplifies. One generation of restored plant growth supports one generation of recovering herds, which supports the return of predators, which allows the grasses to recover further. The cycle, once running , sustains itself.</p>
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Trophic cascades: what real science says about what happens when Mufasa leaves.

The Pride Lands' collapse under Scar is not just a story — it is a precise description of a real ecological phenomenon called a trophic cascade. In 1995, wolves were reintroduced to Yellowstone National Park after an absence of 70 years. Their return changed everything: not just by reducing elk numbers, but by changing elk behaviour. Elk stopped overgrazing riverbanks because wolves made those areas dangerous. The riverbank vegetation recovered. The roots stabilised the riverbanks. The rivers changed their course. Songbird populations increased. Beaver populations increased. The beavers built dams that created wetland habitats for otters, muskrats, and ducks. The wolves, by simply occupying their natural role in the energy cycle, changed the rivers. This is what Mufasa understood and Scar did not: the apex predator is not just a consumer at the top of the food chain. It is a regulator whose presence or absence ripples through every level of the system. When your child watches the Pride Lands turn grey under Scar, they are watching a trophic cascade in animated form.

Energy Cycles in Your Child's Real World: Five Cycles They Are Already Part Of

The energy cycle is not only in the savanna. Every living system runs some version of it, and your child is already part of multiple cycles every day. The following table maps five cycles from a Grade 3 student's real life through their natural structure, what balance looks like, what happens when the cycle breaks, and what the child's role in it is.

The Cycle	In Nature	In Your Child's Life	When Balanced	When Broken	Your Child's Role
The food cycle	<i>Sun → plants → herbivores → carnivores → decomposers → soil → plants. Energy moves from sunlight through every level of the food chain and returns to the beginning through decomposition.</i>	The food your child eats follows this same cycle. Plants grown in the sun feed animals that feed humans. Food waste returned to compost becomes soil that grows new plants. The energy cycle runs through every meal.	A varied diet that includes food from multiple levels of the cycle, with food waste composted rather than landfilled, keeps the household energy cycle as complete and efficient as possible.	Wasted food breaks the cycle at the household level: energy captured by the sun and converted through multiple organisms is discarded rather than transferred to the next level. Food waste in landfill also releases greenhouse gases, adding new disruptions.	Notice where your family's food comes from and where the waste goes. Composting is the most direct way a household can maintain its own small version of the decomp

					<p>user level of the energy cycle — returning organic matter to soil rather than discarding it.</p>
<p>The sleep and energy cycle</p>	<p><i>Plants convert solar energy during the day through photosynthesis and use that stored energy at night for growth and repair. Animals are active when energy is available and rest when it is not. The cycle follows the sun's daily rhythm.</i></p>	<p>Your child's body follows an energy cycle tied to the same solar rhythm: energy input (food) during the day, active use of energy through school and play, rest and repair during sleep, and renewed energy for the next day.</p>	<p>When the cycle runs well — regular meals, active days, consistent sleep — the energy input and output are in balance. Your child has enough energy for learning and play, and enough rest to repair and prepare for the next cycle.</p>	<p>When the cycle is broken — irregular meals, disrupted sleep, too much sedentary screen time — the energy cycle becomes unbalanced. Learning and mood both suffer because the cycle's input and recovery phases are not functioning.</p>	<p>Notice the daily energy cycle as a real system with inputs (food, sleep), transfers (activity, learning), and recovery (rest). The habit of maintaining the cycle's balance — regular meals, active engagement, consistent sleep — is the child's contribution to their own system's health.</p>
<p>The classroom</p>	<p><i>In the savanna, energy flows from input to</i></p>	<p>The teacher provides knowledge</p>	<p>When the cycle is balanced —</p>	<p>When a student is disengaged</p>	<p>Active participation is</p>

<p>learning cycle</p>	<p><i>transfer to recovery and back. In a classroom, knowledge flows from teacher to student to application and back — a cycle of input, processing, output, and feedback.</i></p>	<p>input. The student processes it through attention and engagement. The student demonstrates understanding through work and response. The feedback the teacher receives from the student's output informs the next input. The cycle runs continuously.</p>	<p>genuine attention, genuine engagement, genuine effort on output, honest feedback — the knowledge cycle runs efficiently. Each cycle builds on the previous one.</p>	<p>— attention withdrawn, output minimal or dishonest, feedback not received or acted upon — the cycle breaks for that student. The teacher continues the cycle with the rest of the class, but the disengaged student's cycle has stopped.</p>	<p>the child's contribution to the classroom energy cycle. Attention and genuine effort are the transfers that keep the cycle running for them specifically. A student who participates fully is not just helping themselves — they are contributing to the classroom cycle's quality for everyone.</p>
<p>The household contribution cycle</p>	<p><i>In an ecosystem, every organism contributes to the cycles that sustain it. The lion hunts the herd; the herd grazes the grass; the grass grows from the soil that the lion's body eventually enriches. Every</i></p>	<p>In a household, every member both receives from the household system and contributes to it. Parents provide resources, care, and structure. Children receive those resources and contribute</p>	<p>When every member contributes proportionally to what they receive, the household system runs in balance. Meals are prepared, shared, and cleared. Space is used</p>	<p>When contribution is one-directional — when some members only receive without contributing — the system becomes unbalanced. The members</p>	<p>DGO 6 — Begin to Contribute to Society — begins at home. Your child's contribution to the household cycle —</p>

	<p><i>organism both takes from and gives to the cycle.</i></p>	<p>through their engagement, their cooperation, and eventually their own active help with household functions.</p>	<p>and maintained. The cycle of contribution sustains the household for everyone.</p>	<p>who provide without receiving adequate contribution will eventually be depleted, and the cycle's quality for everyone declines.</p>	<p>however small and age-appropriate — is a genuine contribution to a real system. Noticing what the cycle needs and choosing to contribute to it is the beginning of systems responsibility.</p>
<p>The community and natural environment cycle</p>	<p><i>The savanna's energy cycle sustains not just the lions but every organism in the ecosystem. The cycle is a commons — a shared resource that every organism both depends on and contributes to maintaining through its natural behaviour.</i></p>	<p>Your child's local natural environment — the parks, trees, waterways, and soil near their home — is part of the same global energy cycle the Pride Lands illustrates. The trees capture solar energy, provide habitat, and contribute to the local water and air cycle. The soil supports the plant layer.</p>	<p>When the local environment is maintained — when green spaces are protected, when trees are planted and not felled unnecessarily, when waterways are clean — the local energy cycle runs in balance and everyone who lives within it benefits.</p>	<p>When local green spaces are degraded, paved over, or polluted, the local cycle breaks in the same way the Pride Lands broke under Scar: the plant level is reduced, the animal habitat is diminished, the soil's fertility declines, the local water cycle is disrupted.</p>	<p>Your child's engagement with the local natural environment — noticing it, caring about it, choosing actions that support rather than degrade it — is a genuine contribution to the energy cycle that sustains all life in their</p>

					area. Planting a tree, maintai ning a garden, picking up litter near a waterwa y — these are small contribu tions to the cycle's health at the level where your child can act.
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What to Watch For

The *Lion King* is a film most Grade 3 students will know well. The energy cycle lens makes familiar scenes look different — what felt like a story about a young lion growing up reveals itself as a story about the consequences of an energy cycle breaking and the conditions for its restoration. These notes will help you watch for the cycle specifically.

The Circle of Life opening sequence.

Watch the film's opening sequence as the energy cycle made visible. The sun rises — energy input. The savanna grasses glow in the morning light — the plant layer capturing that energy. The herds move toward Pride Rock — the herbivore level in motion. The birds circle above — the aerial component of the scavenger and decomposer network. And at Pride Rock, Mufasa holds Simba for the assembled animals — the apex predator's role in the cycle acknowledged and celebrated. Everything in this sequence is ecologically accurate: these are real organisms in real relationships, and the film's visual presentation of their gathering is the energy cycle showing itself. Pause on this sequence in your memory after the film and compare it to your memory of the Pride Lands under Scar. The contrast is the lesson.

Mufasa's lesson at the watering hole.

Watch the scene where Mufasa teaches Simba about the Circle of Life carefully. His words are the energy cycle lesson in its most precise form: everything is connected, everything that dies feeds what is living, the balance must be respected. Notice that Mufasa does not teach Simba

that lions are the most important animal in the cycle or that the cycle exists for the lions' benefit. He teaches that the lions exist for the cycle, and that their role is to maintain the conditions under which the cycle can run. This is the most important insight in the lesson: in complex systems, the apex organisms are not the beneficiaries of the cycle. They are its stewards.

The Pride Lands under Scar — watch the colours.

The film uses colour to tell the energy cycle story visually. The Pride Lands under Mufasa are gold, green, and full of life — every colour associated with photosynthesis, growth, and biological richness. The Pride Lands under Scar are grey, brown, and bare — the colours of biological depletion and ecological death. Watch specifically for the moment the transition from one palette to the other happens. It is not a single scene — it is a gradual shift, the way real ecological degradation happens: not all at once but progressively, each step making the next step more visible. By the time Nala finds Simba in the jungle, the Pride Lands look like a different planet from the one the film opened in.

Nala's arrival — the cycle sending its signal.

When Nala finds Simba in the jungle, she is not just a character from his past — she is the energy cycle's messenger. She has left the Pride Lands because there is nothing left to sustain her there. Her thinness, her urgency, and her description of the Pride Lands' collapse are the cycle's feedback signal arriving at the organism that is needed to restore it. Watch Simba's response to her signal: he receives it, he understands it, but he does not immediately act on it. The DGO 3 conversation happens here — Timon and Pumbaa represent one frame (Hakuna Matata: the past doesn't matter, stay comfortable), and Nala represents another (the cycle is broken and you are the missing piece). Simba's internal conflict is the lesson's most emotionally vivid illustration of the choice between victim mindset and responsibility.

Mufasa's voice in the clouds.

The scene where Simba sees his father's image in the clouds and hears his voice is the film's most directly relevant moment for the energy cycle concept: 'You have forgotten who you are, and so you have forgotten me. Look inside yourself, Simba. You are more than what you have become.' Mufasa is not only speaking as a father to a son. He is speaking as the cycle to the organism that the cycle needs. Simba's identity — who he is — is inseparable from his role in the system. Forgetting one is forgetting the other. This is the lesson's most profound and most accessible statement: we are not separate from the cycles we are part of. Our role in those cycles is part of who we are.

The rain after Simba reclaims Pride Rock.

Watch the rain that falls on the Pride Lands immediately after Scar is defeated and Simba takes his place at Pride Rock. This is not a coincidence of weather — it is the film's most direct statement about what the cycle's restoration looks like. The rain represents the water cycle restarting: with the plant layer recovering and the predator-prey balance beginning to restore, the conditions for rainfall return. Rainfall is part of the energy cycle — it is the mechanism by which the soil's nutrients reach the plant roots, completing the circuit from decomposition to new growth. When the cycle's organisms are in their right roles, the cycle's physical components — water, soil fertility, plant growth — restore themselves. The rain is the system saying: the conditions are right again.

Family Discussion Questions

These questions are designed for 8-9 year olds. The Lion King generates deeply felt discussion because children care about its characters. The most productive discussions use that emotional engagement as the entry point to the energy cycle concepts — starting with what characters felt, and moving toward why the system worked the way it did.

1. Mufasa tells Simba that when lions die, their bodies become the grass, and the antelope eat the grass. At first that might sound sad. But is it? What does it mean for Mufasa himself, once we understand the energy cycle?

BUILDS: SYSTEMS THINKING — ENERGY CYCLE AND CONTINUITY

This question asks your child to hold two things simultaneously: the genuine sadness of Mufasa's death and the energy cycle's truth about what that death means for the system. From inside the cycle, Mufasa's death is not an ending — it is a transformation. The energy that his body contains will be broken down by decomposers, returned to the soil, absorbed by the grasses, eaten by the antelope that Simba will one day hunt. In a real and literal sense, Mufasa continues in the cycle he spent his life stewarding. This does not diminish the grief — grief is the appropriate response to loss, and the film respects that completely. But the energy cycle adds a dimension to the grief: the thing that is lost in one form continues in another. For Grade 3 students beginning to encounter the reality of death, this is a genuinely meaningful frame.

"When Mufasa says 'remember me' from the clouds, do you think he is only talking about Simba remembering his father? Or is he also saying something about Simba's role in the cycle? What does it mean to 'remember' someone when they have become part of the system you are responsible for?"

2. The Pride Lands were perfectly healthy under Mufasa. But Mufasa was killed, and Scar did things differently. Which specific change do you think caused the most damage to the energy cycle?

BUILDS: SYSTEMS THINKING — IDENTIFYING THE CRITICAL BREAK

This question asks your child to trace the cascade of damage back to its starting point. The answer is multi-layered: Scar killed Mufasa (removing the apex predator from the cycle), gave the hyenas access to the Pride Lands (placing the wrong organisms in the apex role), and drove Simba away (ensuring no one would restore the correct predator-prey balance). Any one of these changes alone might have been survivable. All three together broke the cycle at the apex predator level, and without the lions hunting in balance, every other level of the cycle deteriorated in sequence. The most important single change was the apex predator level: when Mufasa died and no lion took his role, the cascade was inevitable.

"If Simba had come back to the Pride Lands immediately after Mufasa died — even as a cub — do you think the Pride Lands would still have collapsed the way they did? What was it specifically about the lions being absent that caused all the other problems?"

3. Timon and Pumbaa's philosophy is Hakuna Matata — no worries, forget the past, just enjoy what you have. That helped Simba survive. But it also kept him away from the Pride Lands for years. Was Hakuna Matata good or bad for Simba? Was it good or bad for the Pride Lands?

BUILDS: CRITICAL THINKING — TWO SYSTEMS, ONE DECISION

This question introduces the idea that the same action can be beneficial for one system and harmful for another simultaneously. Hakuna Matata was genuinely good for Simba as an individual organism: it kept him alive, helped him recover from trauma, and gave him a community of sorts. It was genuinely harmful for the Pride Lands as a system: every year Simba spent in the jungle was a year the energy cycle ran without its apex predator, deepening the degradation. This tension — between individual wellbeing and systemic responsibility — is one of the most important and most difficult concepts in systems thinking. There is no clean resolution. The lesson is to see both dimensions clearly rather than to pretend one of them is not real.

"Do you think Simba knew how bad the Pride Lands were getting while he was away with Timon and Pumbaa? And if he had known, do you think he would have stayed anyway? What does it feel like to know that staying comfortable somewhere is hurting a system somewhere else?"

4. Rafiki tells Simba: 'You can either run from it, or learn from it.' He is talking about the past. But in the energy cycle lesson, what does 'running from it' actually mean for a system?

BUILDS: SYSTEMS THINKING — THE ROLE OF RESPONSE

When Rafiki taps Simba on the head and says 'it doesn't matter — it's in the past,' he is demonstrating an important lesson about feedback loops: what matters is not whether a signal was received but whether a response is generated. The past — Mufasa's death, Simba's exile, the hyenas' damage — cannot be undone. The cycle cannot run backward. But the response to the past determines what the cycle does next. Running from it means the cycle continues to degrade, because the organism whose presence would correct the cycle is absent. Learning from it means understanding what the cycle needs and providing it. This is the DGO 1 dimension of the energy cycle lesson: taking responsibility for the future of the cycle rather than being paralysed by the past.

"In your own life, is there something you have been 'running from' — avoiding because it is connected to something difficult — that might need your presence to get better? What would 'learning from it' look like for that thing, rather than running from it?"

5. When Simba returns and the Pride Lands start to recover, the rain comes. Simba did not make it rain. So why does the rain come?

BUILDS: SYSTEMS THINKING — CASCADE EFFECTS IN ENERGY CYCLES

This question asks your child to trace the causal chain between Simba's action and the rain, without attributing the rain to magic or metaphor. The causal chain is real: Simba's return restores the apex predator role → the hyenas are driven out → the predator-prey balance begins to restore → the herds can return to the grasses → the grasses can begin to recover → recovering plant life begins to restore the water cycle (plants transpire water, contributing to local rainfall and maintaining soil moisture). The rain is not a reward for Simba's courage. It is the system responding to the restoration of its missing element. The cycle produces rain when the conditions for the cycle are present. Simba restored those conditions. The rain followed.

"If the rain comes because the cycle is being restored — not as a reward but as a natural consequence — what does that tell you about the relationship between doing the right thing and the world getting better? Is it magic, or is it systems thinking?"

6. The hyenas were not evil — they were just hungry. But under Scar's rule, they consumed more than the cycle could sustain. Is it possible to damage an energy cycle without meaning to?

BUILDS: ETHICAL REASONING — INTENT AND SYSTEMIC CONSEQUENCE

This is one of the lesson's most practically important questions, and it applies directly to Grade 3 students' own environmental awareness. The hyenas were not malicious. They were doing what hungry organisms do: eating what was available. The damage they caused was not intentional — it was the predictable consequence of placing organisms with certain feeding behaviours in an ecosystem that was not designed to sustain those behaviours at that scale. This is the energy cycle's lesson about systemic responsibility: the cycle does not respond to intent. It responds to impact. You can damage a cycle without meaning to, and the damage is real regardless of the intention. Understanding this is the beginning of genuine environmental responsibility.

"Can you think of something that people do — something that seems completely harmless or even helpful — that might be affecting an energy cycle somewhere? What would you need to know to tell the difference between an action that supports the cycle and one that damages it?"

7. Mufasa says 'we are all connected in the great Circle of Life.' What are you connected to — right now, in your real life — that you might not normally think of as part of your cycle?

BUILDS: SELF-AWARENESS AND SYSTEMS THINKING

This question asks your child to extend the energy cycle concept from the Pride Lands into their own life. Every meal your child eats connects them to the plant and animal organisms whose captured solar energy they are consuming. Every breath connects them to the plant life that produced the oxygen. The soil in the garden, the worms in the soil, the bacteria in the worms, the rain that waters the soil — all of these are part of the energy cycle that sustains your child's life. Most of these connections are invisible in everyday life, but they are real and

they are active. Noticing them is the beginning of the ecological literacy that the energy cycle lesson is building.

"If you drew your own Circle of Life — starting with yourself and tracing backward through the food you eat, the air you breathe, and the water you drink — how many organisms do you think you would find connected to you before you reached the sun? How does it feel to be part of that many connections?"

8. Simba was the only one who could restore the Pride Lands. Was that fair? He did not break the cycle — Scar did. Why should Simba have to fix it?

BUILDS: DGO 1 — RESPONSIBILITY WITHOUT GUILT

This question addresses the most personally relevant dimension of DGO 1 for Grade 3 students: the distinction between causing a problem and being responsible for addressing it. Simba did not break the cycle. He was a cub when Mufasa died and Scar took over. By any reasonable accounting, Simba was not responsible for the Pride Lands' condition. And yet he was the only one who could restore it — not because of moral guilt but because of systemic reality: his role in the cycle was the missing element. Responsibility here is not blame. It is the recognition that you are the organism the system needs. Choosing to accept that role, even though you did not cause the problem and could reasonably have stayed away, is the clearest possible expression of DGO 1.

"Have you ever had to fix something you did not break — to help with a problem you did not cause? How did that feel? And is there a difference between 'it's your fault' and 'you are the one who can help'?"

9. Scar told Simba he had caused his father's death, and Simba believed him. That false belief kept Simba away from the Pride Lands for years. How does a false belief about yourself affect the systems you are part of?

BUILDS: SELF-RESPONSIBILITY AND SYSTEMIC IMPACT

This is the film's most personally resonant systems question for Grade 3 students. Simba's false belief — 'I killed my father and I am not worthy to return' — is not just a private emotional experience. It has systemic consequences: the cycle continues to break because the organism it needs is kept away by a lie. False beliefs about ourselves do not stay private. They affect our behaviour, and our behaviour affects the systems we are part of. The energy cycle does not care about Simba's internal narrative. It responds to whether he is present or absent. Building self-responsibility requires examining the beliefs that keep us absent from the systems we are part of — and asking whether those beliefs are true or whether they are, like Simba's, the product of someone else's manipulation.

"Is there something you have told yourself about yourself that might be keeping you from doing something important — something that would be good for you or for the people around you? Where did that belief come from? And is it actually true?"

10. At the very end, Simba's cub is presented at Pride Rock and the circle begins again. But the Pride Lands went through a whole cycle of health, collapse, and restoration. What did the system learn, if anything?

BUILDS: REFLECTION — SYSTEMS, MEMORY, AND RESILIENCE

This final question asks your child to think about whether systems can learn — whether the experience of the cycle's disruption and restoration leaves any lasting mark on the system's capacity to survive future disruptions. In ecological terms, systems that have survived disruption often have greater structural diversity and resilience than those that have not: the recovery of the Pride Lands under Simba will produce a savanna that has experienced both thriving and surviving, and the organisms that return will carry that history in their adaptations. In human terms, the Pride Lands that Simba passes to his cub will presumably be stewarded with greater awareness of what happens when the cycle's stewardship fails. The lesson the system learns is carried not in the soil but in the memory of the organisms — particularly the ones who can tell the story.

"If you were going to tell Simba's cub — the new heir to Pride Rock — the most important thing about what happened during Scar's reign and why it happened, what would you say? What is the one thing you would most want the next generation to understand about energy cycles and responsibility?"

Bonus: Map Your Own Circle of Life

After the film, try this activity from the Energy Cycles lesson. Choose one thing your child eats regularly and trace the energy cycle backward from their plate to the sun.

1. **Start with the meal.** Choose something specific from a recent meal — a piece of chicken, a carrot, a bowl of rice, a glass of milk. Write it in the centre of a large circle on paper. This is your organism's position in the energy cycle.
2. **Trace backward through the chain.** Ask: what did this organism eat? If it is chicken, the chicken ate grain. The grain grew from soil, water, and sunlight. If it is a carrot, the carrot grew from soil and sunlight directly. If it is milk, the cow ate grass, the grass grew from soil and sunlight. Trace each step backward until you reach the sun. Draw each step on the circle and connect them with arrows.
3. **Add the decomposer layer.** Ask: what happens to the parts of each organism that are not eaten? The chicken bones, the carrot tops, the grain husks — what happens to those? They are broken down by decomposers — bacteria, fungi, worms — and returned to the soil as nutrients. Add the decomposer step to your circle and connect it back to the soil level. The circle is now complete.
4. **Find your place in the circle.** Ask: where does your child go in this circle? They are at the top of the food chain for this meal — they have consumed the energy that the sun, the soil, the plants, and the animals all transferred step by step. And when they breathe

out, their carbon dioxide goes to the plants. When their food waste is composted, it goes back to the soil. They are not outside the circle. They are in it.

Mufasa's Circle of Life is not a metaphor. It is a description of a real process that connects your child to every organism that participated in the energy chain that produced their lunch. Drawing it makes the invisible visible — and visible things are the ones we can take responsibility for. Simba's return to the Pride Lands began with seeing the cycle clearly. Your child's circle begins the same way.

Parents' Note

The *Lion King* is rated G and runs 88 minutes. It is one of the most watched and most discussed films in children's cinema history, and most families will find it a comfortable and enjoyable viewing experience. Its emotional depth — unusual for a G-rated animated film — is exactly what makes it effective for the energy cycle lesson: your child's emotional investment in the characters makes the abstract concept of energy cycles personally meaningful.

Mufasa's death and how to use it. The film's central emotional event is also its central energy cycle lesson. Mufasa's body becomes the grass that feeds the antelope that Simba will one day hunt — this is not a consolation story, it is the decomposer level of the energy cycle described as a king's wisdom. After the film, the conversation about Mufasa's death can be both emotionally honest and scientifically grounded: 'Mufasa said our bodies become the grass. That is actually true. It is called decomposition, and it is the step in the energy cycle that returns the energy locked in a dead organism back to the soil. Mufasa's death was sad — and it was also the cycle continuing exactly the way it is supposed to.'

The trophic cascade and real science. The callout box in this guide introduces the Yellowstone wolf reintroduction — a real and well-documented trophic cascade that mirrors the Pride Lands story almost exactly. If your child asks whether what happens in the film could happen in real life, the honest answer is: yes, and it has. The wolf reintroduction is accessible in child-friendly documentary form (there are several good short videos online), and watching one with your child after *The Lion King* is one of the most effective ways to connect the film's lesson to genuine ecological science.

DGO 1 in the family context. Build Self-Responsibility is the primary DGO, and the *Lion King* conversation it opens is particularly useful for Grade 3 students who are beginning to be aware of their role in the household and community systems they are part of. The question 'what is your role in the cycles you are part of?' is applicable to the family immediately after the film: 'Simba had a specific role in the Pride Lands' energy cycle, and the cycle needed him to be present and active in that role. What roles do you have in our household? What would the household cycle look like if you were absent from those roles?' The conversation does not need to be about chores. It is about genuine systemic contribution.

Grade 3 and ecological literacy. Grade 3 is the point in the curriculum where the energy cycle lesson begins to connect to genuine ecological science. Your child is ready to understand photosynthesis as a real process, food chains as real relationships, and decomposition as a real mechanism rather than a vague 'returning to nature.' The film's emotional framework makes these concepts feel meaningful before they become formally scientific. The goal of the lesson is

not for your child to memorise the steps of the carbon cycle — it is for them to feel, through Simba's story, why those steps matter and what is at stake when they are disrupted.

The 2019 remake. If your family prefers the 2019 photorealistic version, it covers the same story and serves the same lesson. The energy cycle content is identical. The 1994 animation is preferred for this guide because its more stylised presentation of the Pride Lands — the exaggerated colours, the sweeping vistas, the graphic contrast between the healthy cycle and the broken one — makes the visual storytelling of the energy cycle more emotionally immediate. Both versions end at the same place. Use whichever your child will engage with most fully.