Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **10,000 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

   =   _____ kcal

x 0.6   **Round 1 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

   =   _____ kcal

x 0.6   **Round 2 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
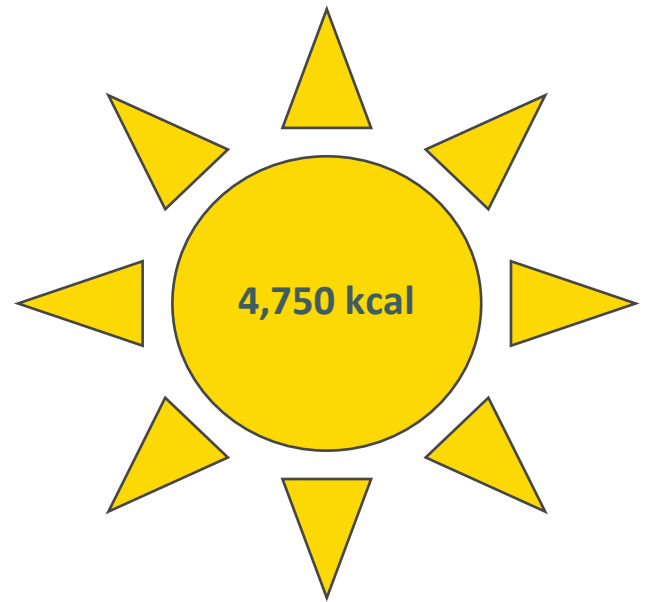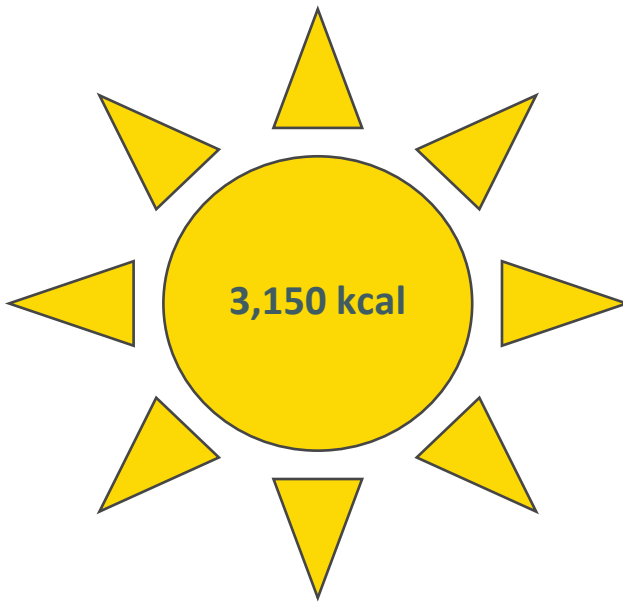(from sun)

   =   _____ kcal
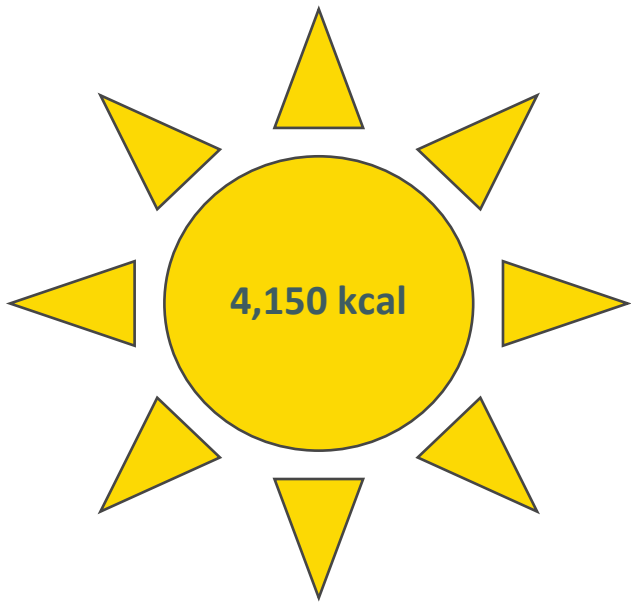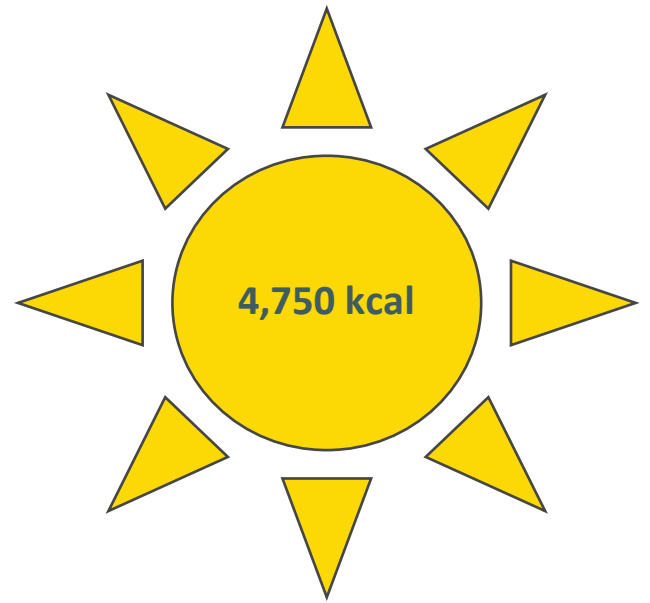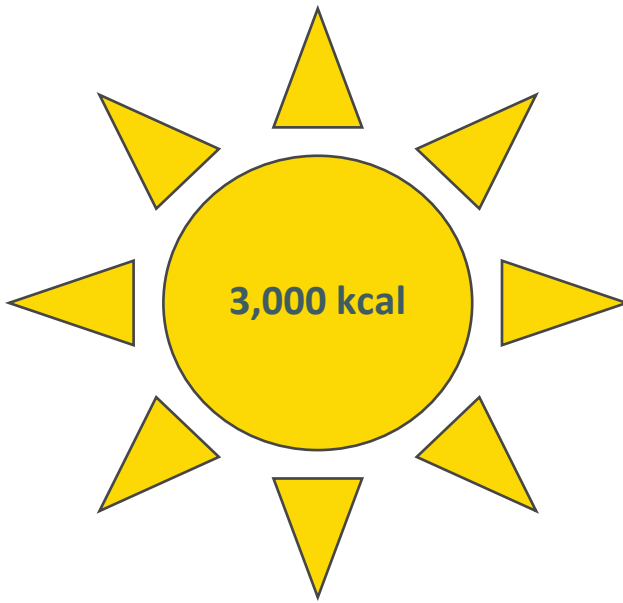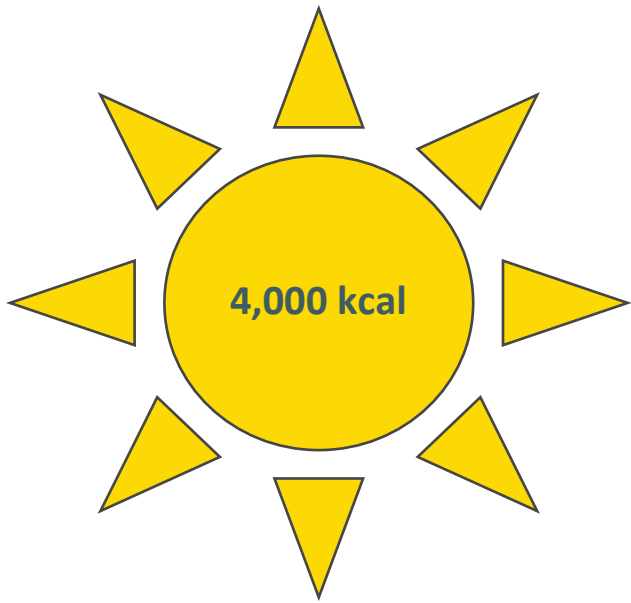
Round 3 End Energy

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **10,250 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

   =   _____ kcal

x 0.6   **Round 1 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

   =   _____ kcal

x 0.6   **Round 2 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

   +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

   =   _____ kcal

Round 3 End Energy

4,000 kcal

3,000 kcal

4,750 kcal

4,150 kcal

3,150 kcal

4,750 kcal

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **11,250 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**

x 0.6   **Round 1 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**

x 0.6   **Round 2 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**
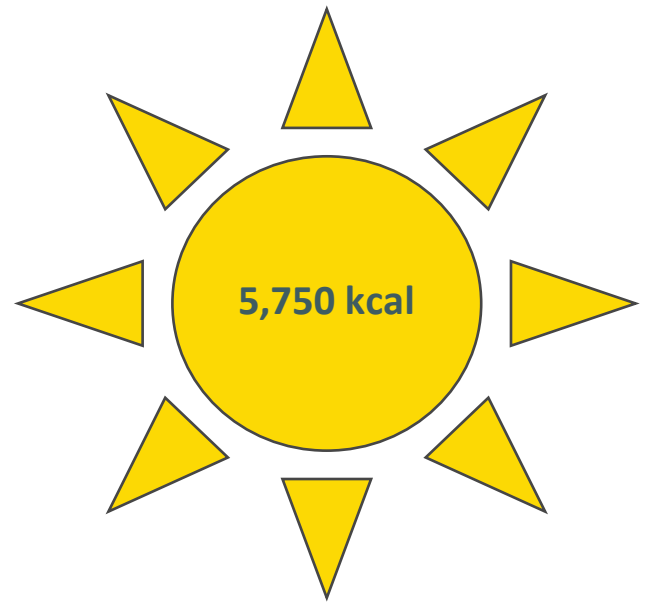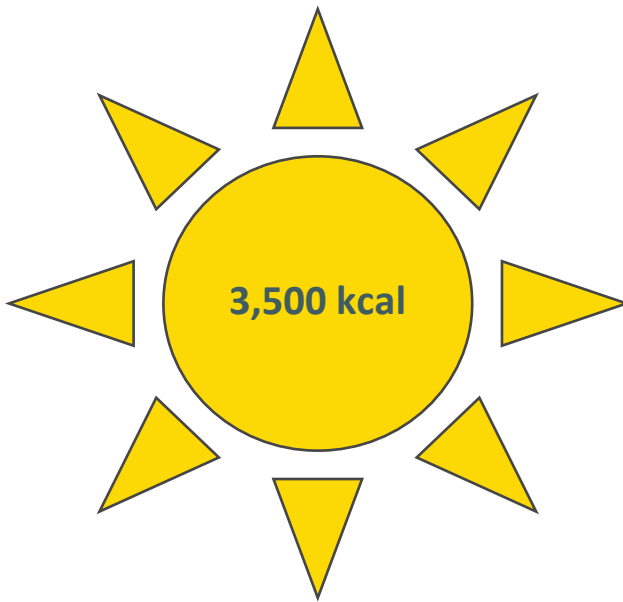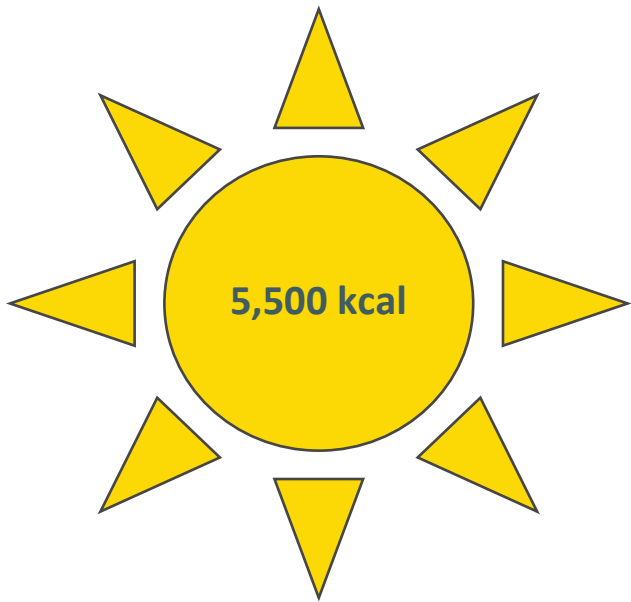
Round 3 End Energy
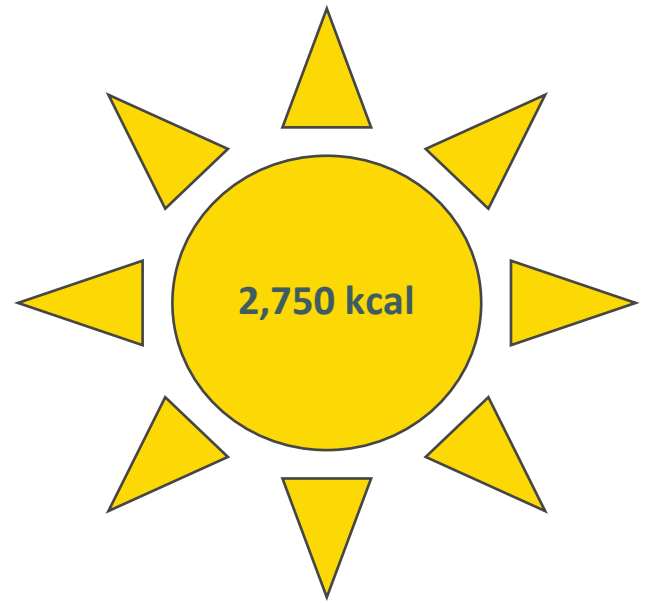

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **12,500 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**

x 0.6   **Round 1 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**

x 0.6   **Round 2 End Energy**   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

    +   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

    =   _____ **kcal**

Round 3 End Energy

5,750 kcal

6,750 kcal

2,750 kcal

5,500 kcal

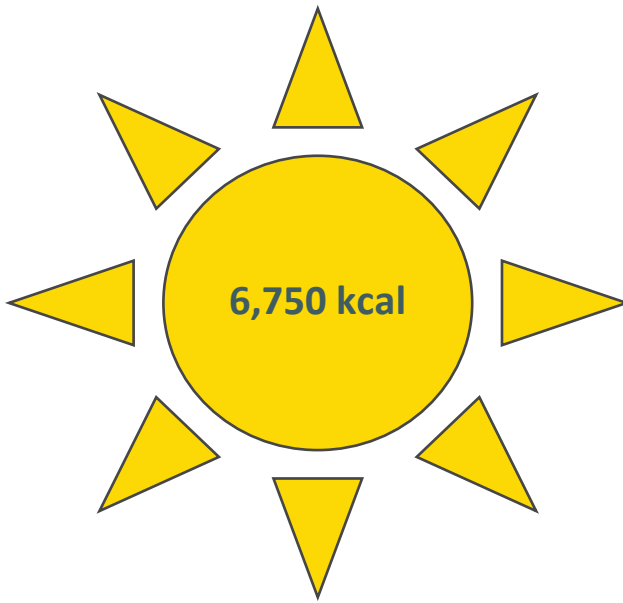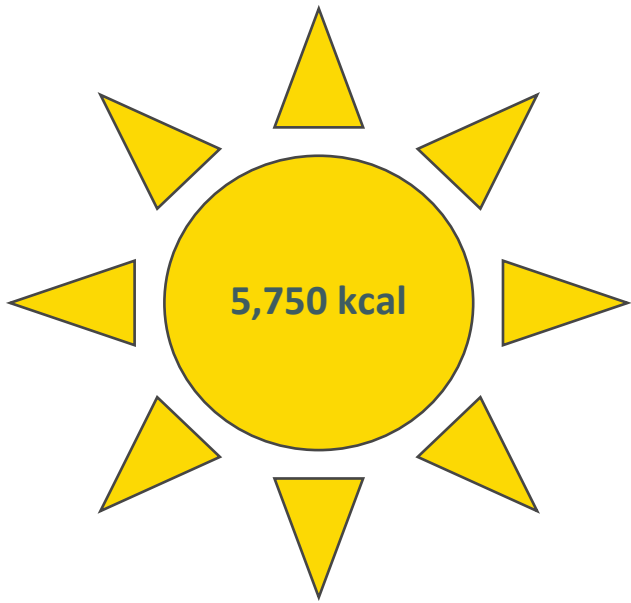3,500 kcal

5,750 kcal

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

Left Panel

x 0.6   **13,000 kcal**   x 0.1

Starting Energy

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 3 End Energy
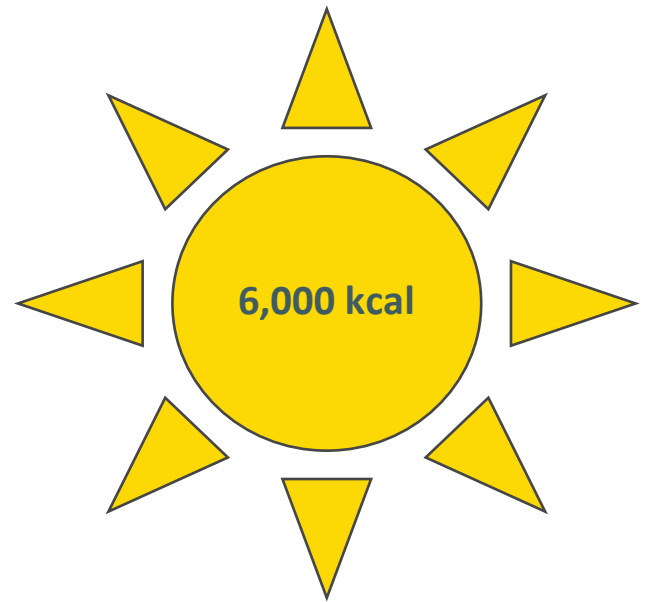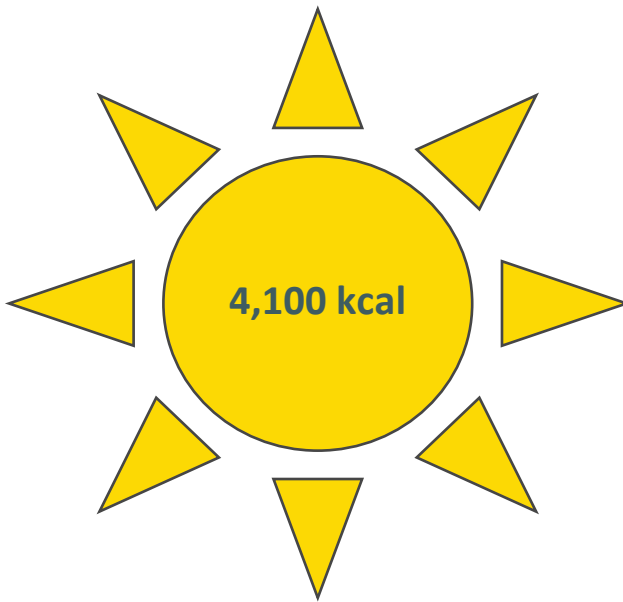

Primary Producer

Right Panel

x 0.6   **13,500 kcal**   x 0.1

Starting Energy

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

(my predator multiplies this by 0.5)

+

I get 100% _____
(from sun)

= _____ kcal

Round 3 End Energy

5,800 kcal

3,800 kcal

5,800 kcal

6,100 kcal

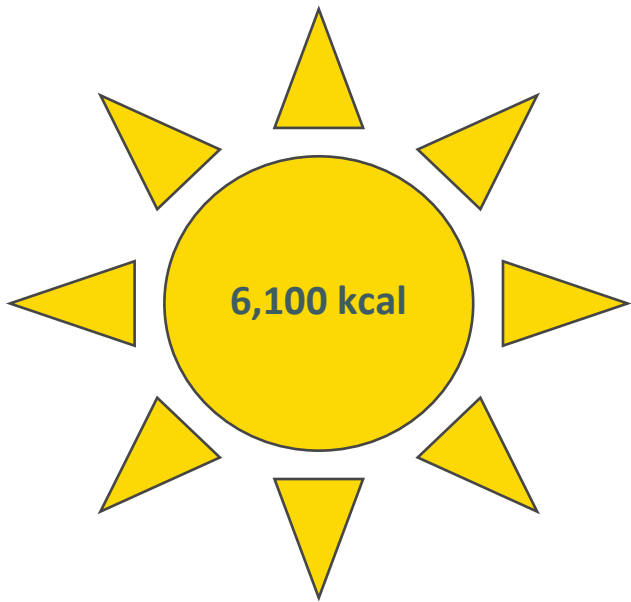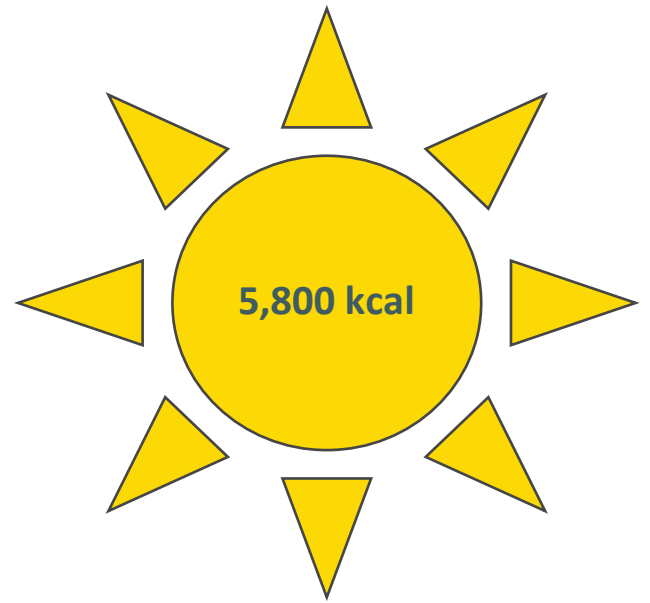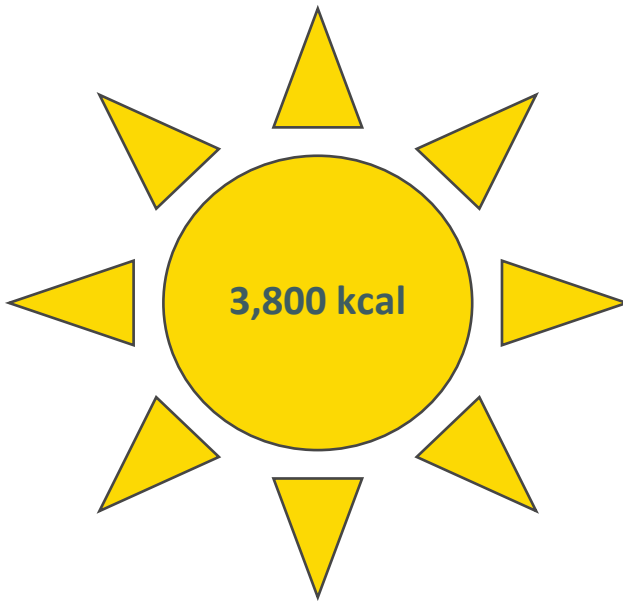4,100 kcal

6,000 kcal

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **14,000 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

= _____

Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

= _____

Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

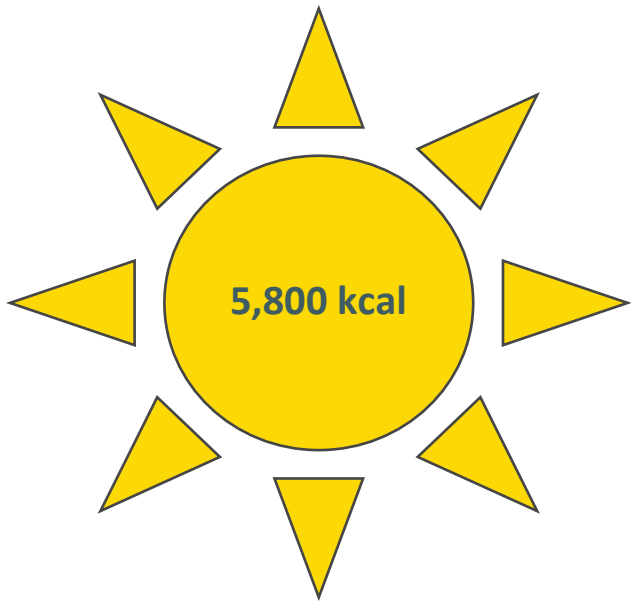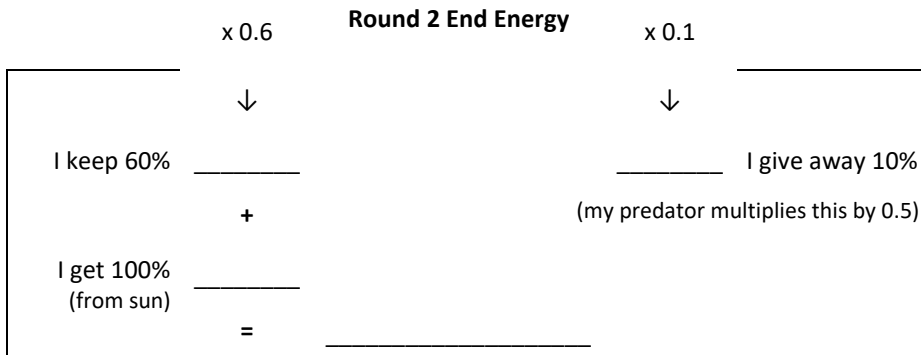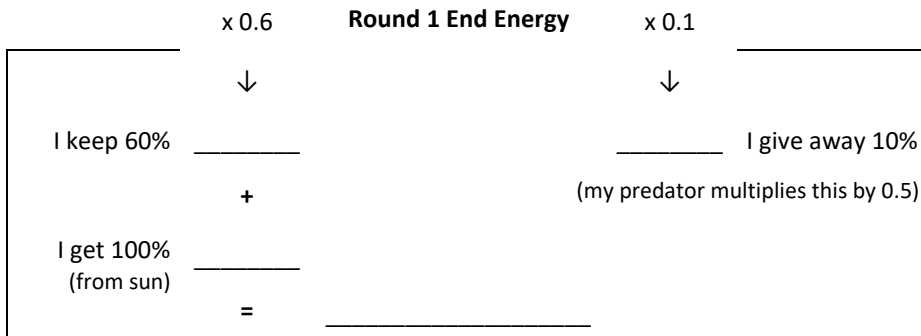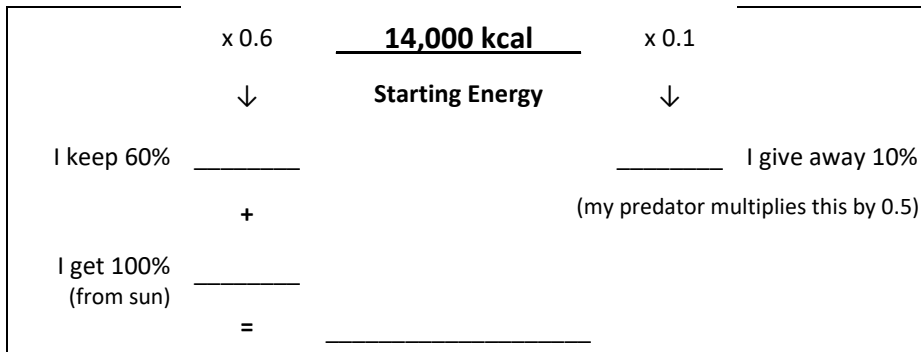= _____

Round 3 End Energy

Primary Producer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
I **get 100%** of my energy from the sun.

x 0.6   **15,500 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

= _____

Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

= _____

Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.5)

I get 100% _____
(from sun)

= _____

Round 3 End Energy

6,400 kcal

4,400 kcal

6,000 kcal

7,300 kcal

5,300 kcal

6,300 kcal

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
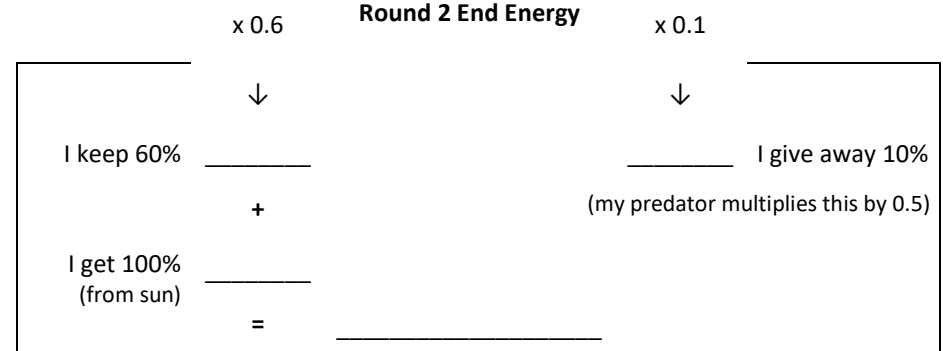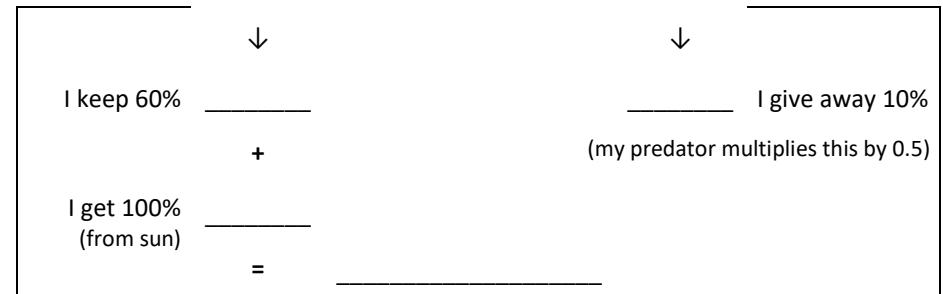When I eat, **I eat 50%** of the energy my partner can give away.

x 0.6   **1,000 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

x 0.6   **Round 1 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

x 0.6   **Round 2 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

Round 3 End Energy

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
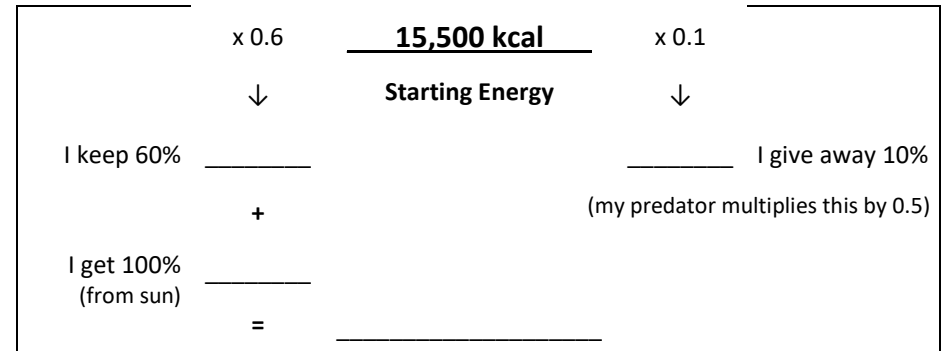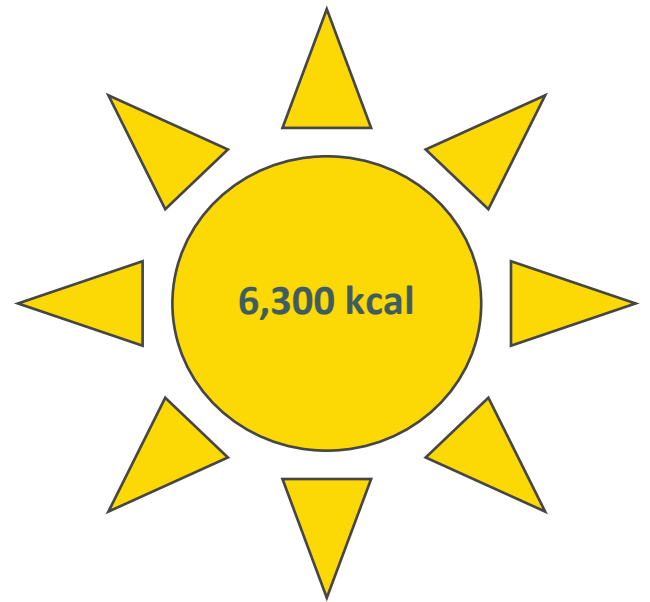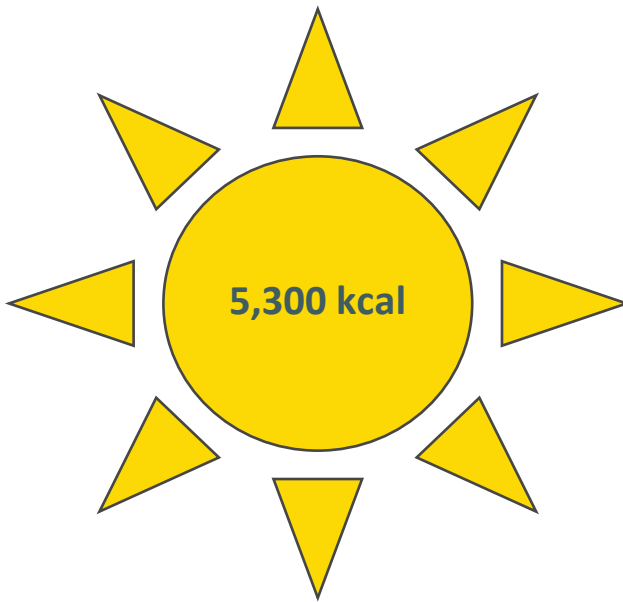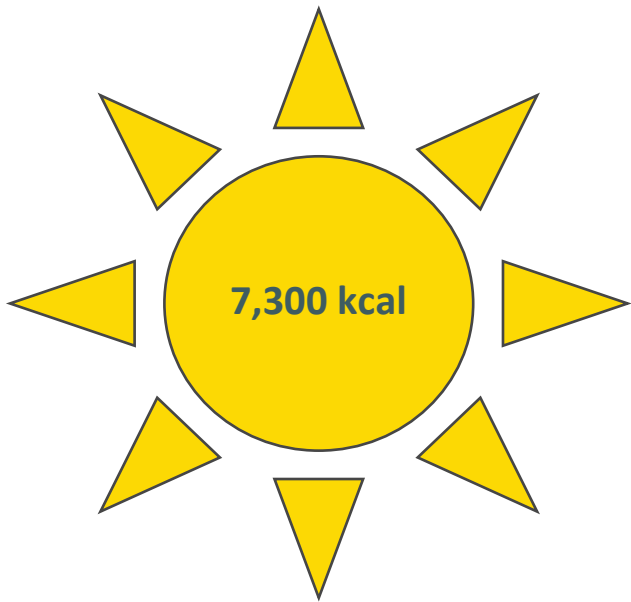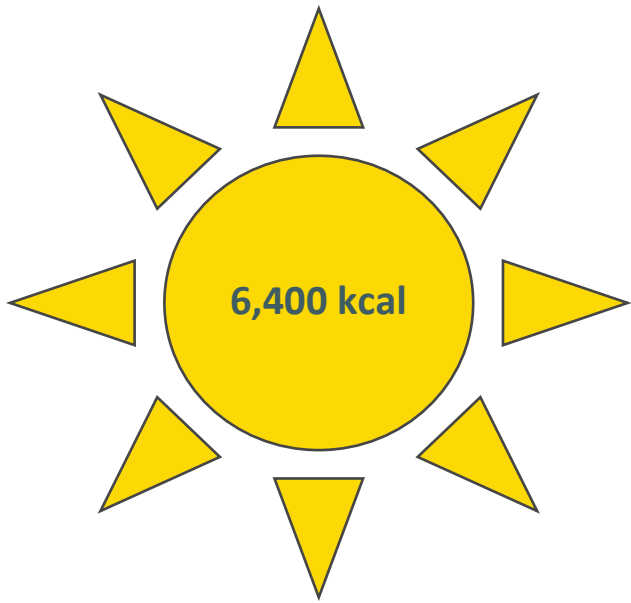When I eat, **I eat 50%** of the energy my partner can give away.

x 0.6   **1,100 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator mAultiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

x 0.6   **Round 1 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

x 0.6   **Round 2 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

=   _____

Round 3 End Energy

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 50%** of the energy my partner can give away.

x 0.6   **1,600 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 50% _____
(from prey)
=   _____
Round 1 End Energy

x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 50% _____
(from prey)
=   _____
Round 2 End Energy

x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 50% _____
(from prey)
=   _____
Round 3 End Energy

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
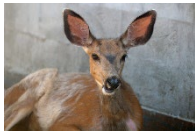When I eat, I **eat 50%** of the energy my partner can give away.

x 0.6   **1,800 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 0% _____
(from prey)
=   _____
Round 1 End Energy

x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 50% _____
(from prey)
=   _____
Round 2 End Energy

x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%
+   (my predator multiplies this by 0.7)
I eat 50% _____
(from prey)
=   _____
Round 3 End Energy

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 50%** of the energy my partner can give away.
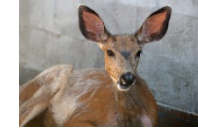
x 0.6   **2,000 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

x 0.6   **Round 1 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

x 0.6   **Round 2 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

Round 3 End Energy

Primary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 50%** of the energy my partner can give away.

x 0.6   **2,500 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

x 0.6   **Round 1 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

x 0.6   **Round 2 End Energy**   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 50% _____
(from prey)

= _____

Round 3 End Energy

Secondary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   **100 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 3 End Energy

Secondary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   **200 kcal**   x 0.1

↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 1 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 2 End Energy

x 0.6   x 0.1

↓   ↓

I keep 60% _____   _____ I give away 10%

+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

=

_____
Round 3 End Energy

Secondary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   **300 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

\=   _____

Round 1 End Energy
x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

\=   _____

Round 2 End Energy
x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

\=   _____

Round 3 End Energy

Secondary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
I can **give away 10%** of my starting/end of round energy away.
When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   **400 kcal**   x 0.1
↓   **Starting Energy**   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

\=   _____

Round 1 End Energy
x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)

I eat 70% _____
(from prey)

\=   _____

Round 2 End Energy
x 0.6   x 0.1
↓   ↓

I keep 60% _____   _____ I give away 10%

\+   (my predator multiplies this by 0.7)
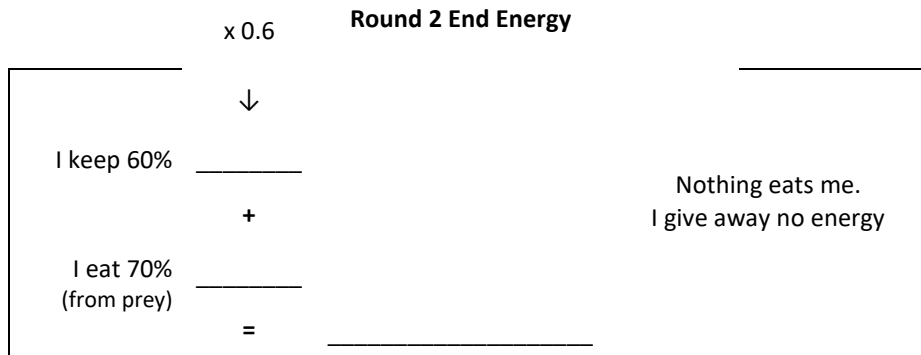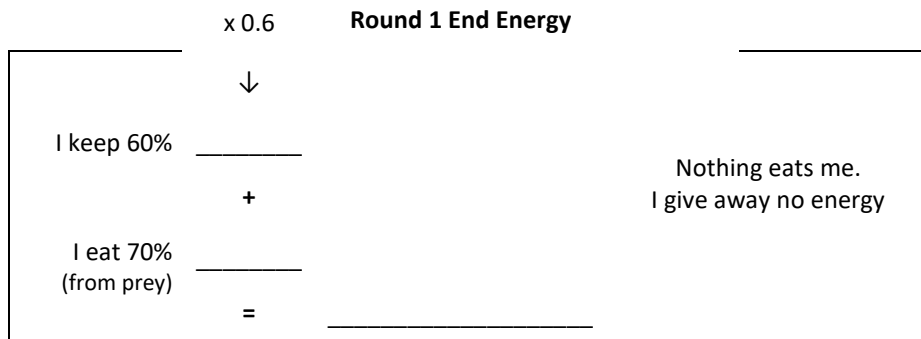
I eat 70% _____
(from prey)

\=   _____

Round 3 End Energy

Tertiary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
No one in this environment eats me, so I give no energy away.
When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   _____ **40 kcal** _____
Starting Energy

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____

=   _____

Nothing eats me.
I give away no energy

Round 1 End Energy

x 0.6

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____

=   _____

Nothing eats me.
I give away no energy

Round 2 End Energy

x 0.6

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____
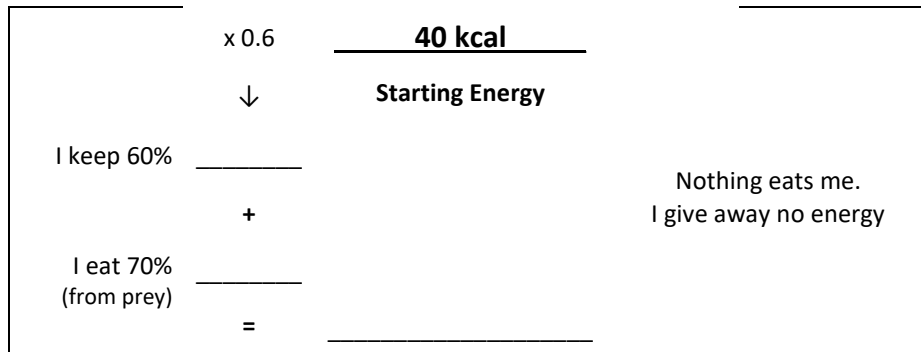
=   _____

Nothing eats me.
I give away no energy

Round 3 End Energy

Tertiary Consumer

I **keep 60%** of my starting/end of round energy for the next round.
No one in this environment eats me, so I give no energy away.
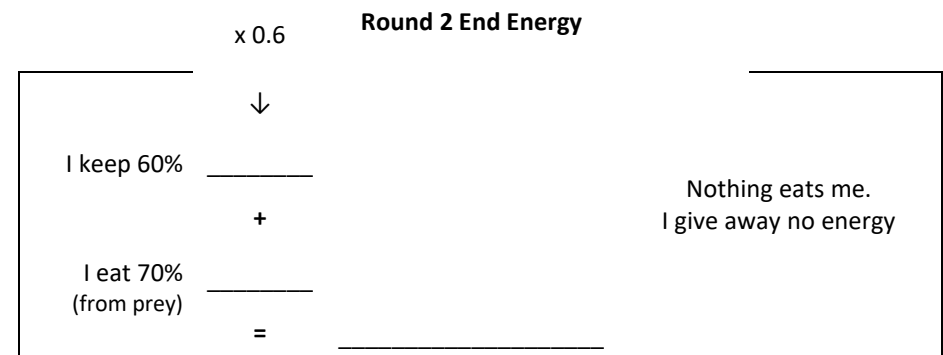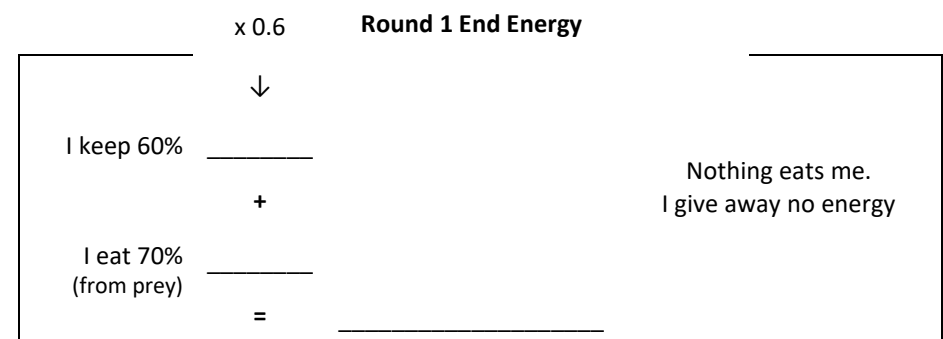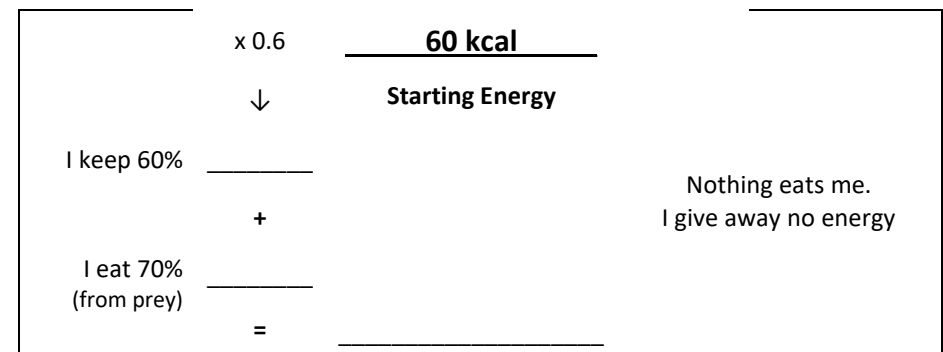When I eat, I **eat 70%** of the energy my partner can give away.

x 0.6   _____ **60 kcal** _____
Starting Energy

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____

=   _____

Nothing eats me.
I give away no energy

Round 1 End Energy

x 0.6

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____

=   _____

Nothing eats me.
I give away no energy

Round 2 End Energy

x 0.6

↓

I keep 60%   _____

+

I eat 70%
(from prey)   _____

=   _____

Nothing eats me.
I give away no energy

Round 3 End Energy